



CITY OF RICHMOND

DEPARTMENT OF PUBLIC UTILITIES

DIVISION OF WASTEWATER TREATMENT

March 26, 2014

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Mr. Michael Murphy
Regional Director
Piedmont Regional Office
Virginia Department of Environmental Quality
4949-A Cox Road
Glen Allen, VA 23060-6295

Subject: City of Richmond, Virginia
VPDES Permit No. VA0063177
Combined Sewer System Annual Report for 2013

Dear Mr. Murphy:

Submitted herewith are two copies of the subject report in compliance with Section E, Combined Sewer System of the City's VPDES Permit.

If you have any questions or require additional information, please feel free to call at (804) 646-8903.

Yours very truly,

A handwritten signature in black ink, appearing to read "Clair Watson".

Clair Watson
Operations Manager

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VPDES Permit No. VA 0063177

Combined Sewer System Annual Report for 2013

**City of Richmond, Virginia
Department of Public Utilities**

March 2014

Combined Sewer System Report for 2013

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Section 1 Introduction and Summary

1.1 Introduction

The City of Richmond (City), capital of Virginia, is located astride the James River along the Falls of the James as shown on Figure 1-1. The City provides public wastewater collection and treatment services for the City and immediately adjacent areas in Henrico and Chesterfield Counties.

The City has a land area of about 38,000 acres and a population of about 210,309 persons. The wastewater collection and treatment facilities serve a population of about 216,000 persons.

The older central part of the City was built with combined sewers and areas outside the combined sewer system (CSS) area are served by separate sanitary and storm sewers.

1.1.1 Combined Sewer System – General

The City's CSS comprises approximately 12,000 acres or about 32 percent of the City. The area served by combined sewers is shown on Figure 1-2.

In May of 2013, two CSO locations were separated and removed from the list of active CSOs. The two locations are:

- CSO 002, Orleans Street
- CSO 003, Nicholson Street

There are now 26 combined sewer overflow points (CSO outfalls as listed in Table 1-1).

The CSS areas and individual CSOs are shown on Figure 1-3.

1.1.2 Combined Sewer System – Facilities and Operation

A system of intercepting and trunk sewers links the separate and combined systems with the Richmond wastewater treatment plant (WWTP). This system is shown on Figure 1-4. There is a mechanical or hydraulic control regulator structure at each CSO. Typical regulator arrangements are shown on Figures 1-5 and 1-6, respectively, for mechanical and hydraulic designs. Each regulator diverts all dry weather flow (DWF) to the WWTP. During wet weather events, each regulator diverts flow in excess of DWF to capture combined flow for treatment to the extent possible. Each CSO regulator facility has capacity to divert to the intercepting sewer for conveyance to the WWTP for complete treatment well in excess of three (3) times DWF.

The CSS also includes a 45.0 mg retention facility on the Shockoe Creek CSO Area. This facility (Shockoe Retention Basin) captures the first 45.0 mg of combined sewer wet weather flow and provides complete screening for flow rates greater than 5000 cfs (3232 mgd). In May 2003, the Hampton/McCloy CSO Retention Tunnel was placed on line (Division 4 and 5). This facility (Hampton/McCloy CSO Retention Tunnel) captures the first 7.2 mg of combined sewer wet weather flow in the Hampton/McCloy CSS basins with complete screening. The WWTP is designed to empty retained flow from the retention basin and tunnel within 48 hours following after CSO treatment conditions cease to exist and treat the

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retention basin flow plus collection system flow to permit limits. A location plan of the wastewater treatment facilities, Shockoe retention facilities, and Hampton/McCloy CSO Retention Tunnel is shown on Figure 1-7 and a diagram of the WWTP is shown on Figure 1-8. A diagram of the Hampton/McCloy CSO Retention Tunnel is shown on Figure 1-9.

1.1.3 VPDES Permit

On March 21, 2005, the Office of Permit Support (OPS) of the Virginia Department of Environmental Quality (VDEQ) issued VPDES Permit No. VA0063177 authorizing the Richmond WWTP to discharge into the James River in accordance with the effluent limitations, monitoring requirements and other conditions set forth in the permit. One of the conditions stipulated in the permit requires that the City must continue to implement and document operation and maintenance activities relative to the combined sewer overflows (CSO) and their effects on receiving water quality and shall submit an annual report by March 31st of each year documenting the following:

- Modeled results of the number and volume of overflows for each CSO outfall based on measured storm event data for the previous calendar year.
- Results of the Shockoe Creek and James River Monitoring performed in accordance with the permit.
- A summary of action taken during the previous calendar year for meeting the nine minimum controls.

1.1.4 Nine Minimum Controls

The City's VPDES permit includes the following nine minimum controls:

USEPA Nine Minimum Controls	VPDES Permit No. 0063177
Proper Operations and Maintenance	Permit: Part E.1.a.
Maximize Use of Collection System for Storage	Permit: Part E.1.b.
Review and Modify Pretreatment Requirements	Permit: Part E.1.c
Maximize Flow to the POTW for Treatment	Permit: Part E.1.d.
Eliminate Dry Weather Overflows	Permit: Part E.1.e
Control Solids and Floatables in CSOs	Permit: Part E.1.f and local program
Pollution Prevention	Permit: Part E.1.g and local program
Public Notification	Permit Part E.1.h and local program
Monitoring	Permit Part E.1.i

This report documents the City's continued efforts to monitor and sample Shockoe Combined sewer area, to update both SWMM model and PULSEQUAL model, and to comply with the nine minimum controls.

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1.2 Summary

The CSS is administered by the City's Department of Public Utilities (DPU) who reports to the Chief Administration Officer. DPU staff is also supplemented by the use of private contractors. A memorandum of understanding (MOU) was prepared and distributed in February 1998 to all responsible agencies to assist the Division of Wastewater Treatment (DWT) to comply with VPDES Permit No.

0063177. The MOU outlined the nine minimum controls required by the permit, identified various City agencies and associated individuals responsible for implementing and documenting the nine minimum controls and formalized a reporting procedure to be used for centralizing the records for the preparation of an annual report. The MOU was utilized in completion of this annual report. The City's activities and programs have been documented in detail in the following sections of this report and are summarized in Table 1-2.

Combined Sewer System Report for 2013
Table 1-1

List of 26 CSO Outfalls
City of Richmond, Virginia

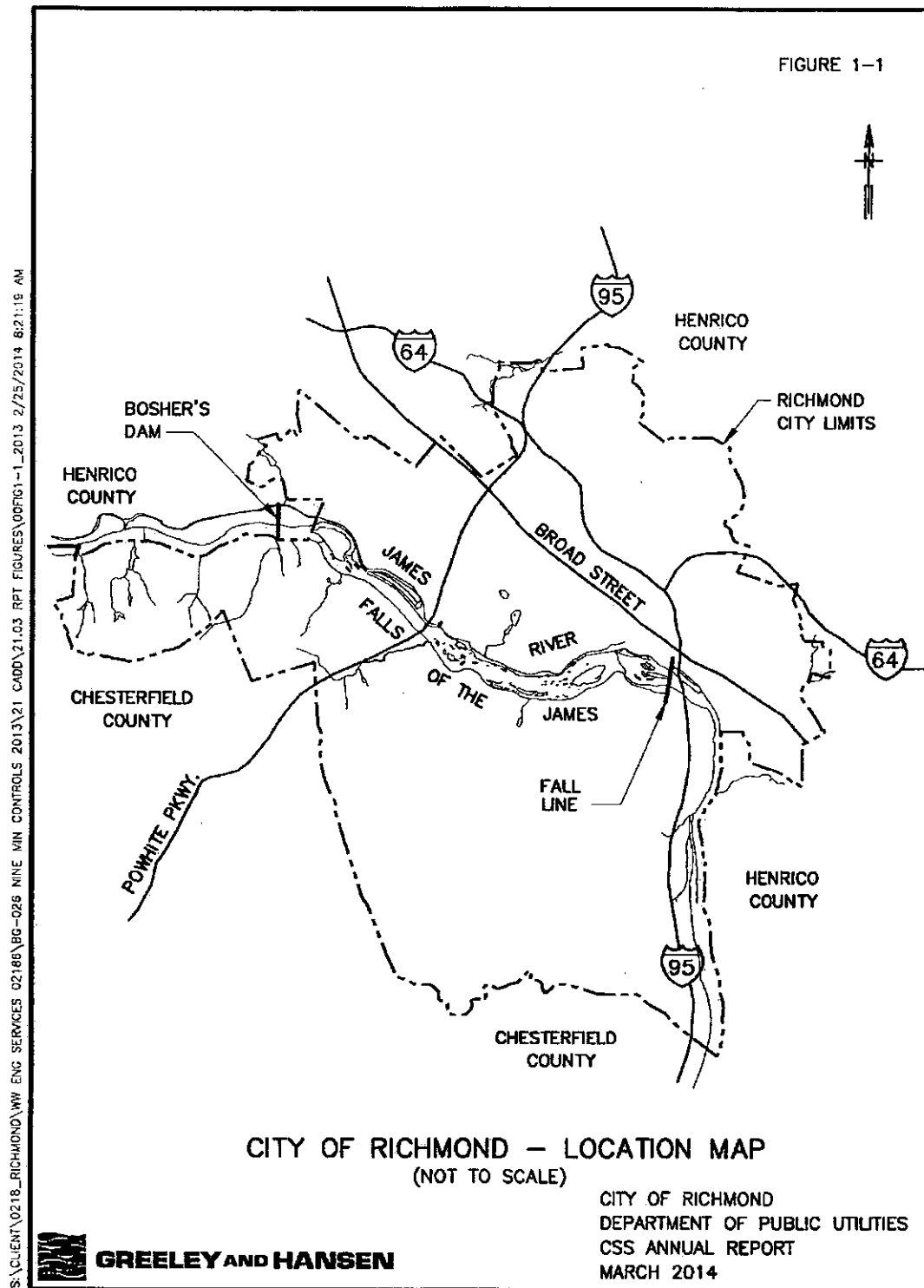
CSO Number	Combined Sewer Overflow Name	Receiving Water
Hampton Street CSO Area		
19	Hampton Street	James River
33	Shields Lake	Dooleys Branch
McCloy Street CSO Area		
20	McCloy Street	James River
Northside James River Park CSO Area		
7	Byrd Street	James River
9	6 th & 7th Streets	Haxall Canal
10	Gambles Hill	Haxall Canal
11	Park Hydro	James River
Southside James River Park CSO Area		
15	Canoe Run	James River
16	Woodland Heights	James River
17	Reedy Creek	James River
18	42nd Street	James River
40	CSO-1 Out/SSJRP	James River
Shockoe Creek CSO Area		
6	Shockoe Creek	James River
34	19th & Dock Street	Richmond Dock Canal
Wastewater Treatment Plant CSO Area		
14	Stockton Street	Manchester Canal
21	Gordon Avenue	James River
Gillies Creek CSO Area		
2	Orleans Street / Removed as of May 14, 2013	James River/Removed
3	Nicholson Street / Removed as of May 14, 2013	James River/Removed
4	Bloody Run	Gillies Creek
5	Peach Street	James River
24	Gillies & Varina Streets	Gillies Creek
25	Briel Street & Gillies Creek	Gillies Creek
26	Gov't Rd. and NSRR	Gillies Creek
28	Williamsburg Road	Gillies Creek
31	Oakwood Cemetery	Stony Run
35	29th & Dock Streets	Richmond Dock Canal
39	Gov't Road and Gillies Creek	Gillies Creek
Hilton Street CSO Area		
12	Hilton Street	Almond Creek

Count: 26

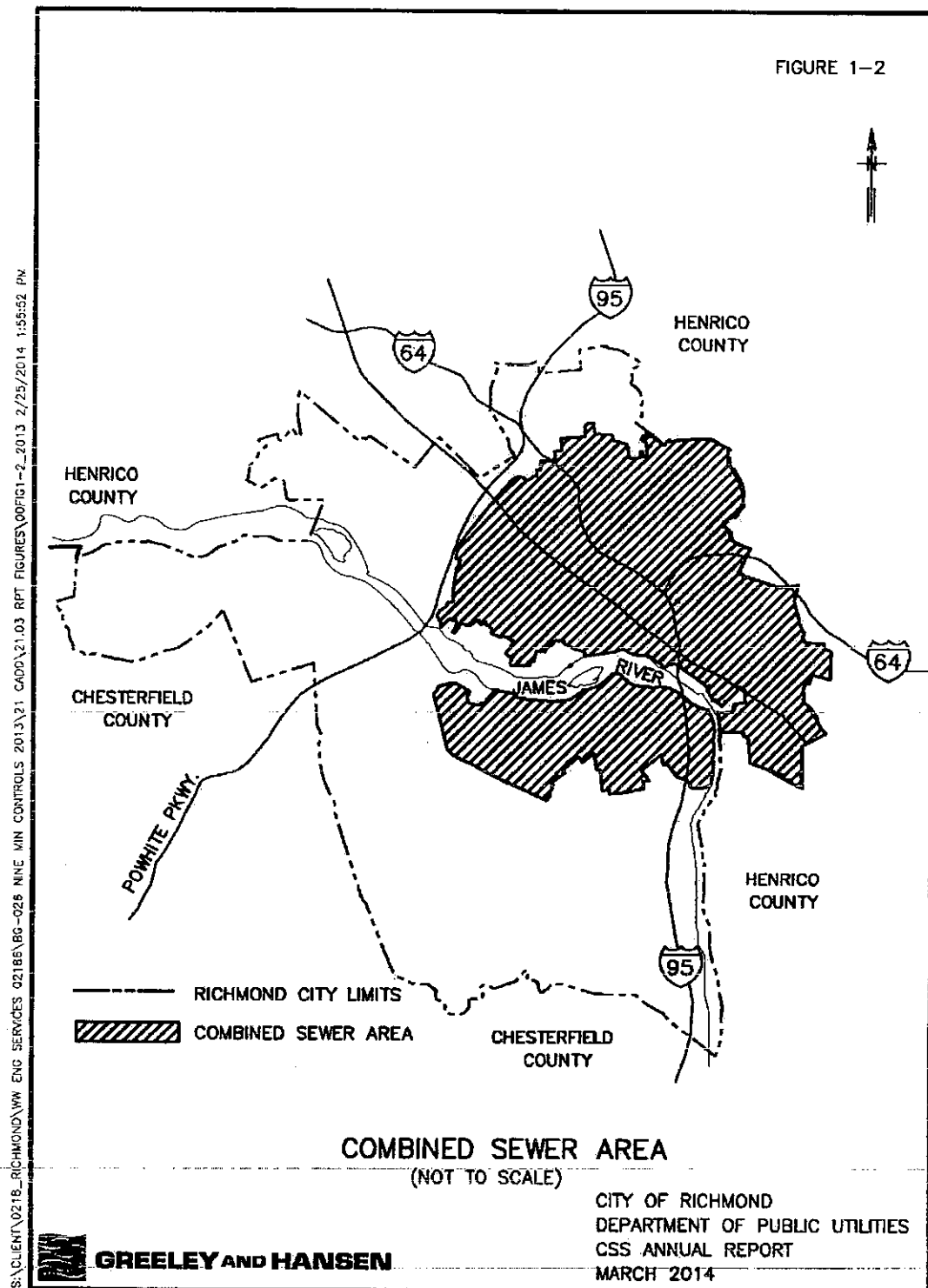
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Table 1-2
Summary of Nine Minimum Control Measures

MINIMUM CONTROL	CONTROL MEASURES IMPLEMENTED
Proper Operation and Maintenance	<ul style="list-style-type: none"> CSO control structures (e.g. regulators and tidegates) inspected and PM'd. once per month Pumping Stations inspected, screenings removed and PM'd. daily Regular program of sewer flushing
Maximize Use of Collection System for Storage	<ul style="list-style-type: none"> CSO regulator controls set to optimize storage in intercepting system Shockoe Retention System (55mg) serves about 8,000 acres of CSS and captures an average of about 1,416 mg of combined sewer flow annually (about 43.1 percent) of the total that would otherwise overflow. Retained flow receives complete treatment within 48 hours. Approximately 25,000 feet of sewer are relined annually to reduce I/I WWTP influent pumping adjusted during wet weather events to fill intercepting system to level of lowest overflow Tide gates adjusted and repairs made to control tidal intrusion Public and private facilities required to install stormwater storage in combined sewer area Floodwall pumping stations include excess flow holding ponds to maximize storage during flood periods
Review and Modify Pretreatment Requirements	<ul style="list-style-type: none"> Pretreatment ordinance and program in effect CSO modeling and analysis does not show any impacts that might be attributed to nondomestic sources Several industries retain stormwater during wet weather events and control releases after the event to stay within pipe capacities Discharge of water treatment plant residuals to the CSS is stopped during wet weather events
Maximize Flow to the POTW for Treatment	<ul style="list-style-type: none"> Treatment rates at POTW are increased during wet weather events POTW has high flow treatment plan designed to convey in excess of twice DWF through complete treatment during wet weather events Retention facilities are emptied within 48 hours following a wet weather event Retained flow receives complete treatment to permit limits
Eliminate Dry Weather Overflows (DWOs)	<ul style="list-style-type: none"> Combined sewer diversion system design has capacity to convey in excess of 3 times DWF to WWTP Diversion facilities inspected regularly and PM'd to insure they are in proper working order Pumping stations are monitored to detect any DWOs caused by clogging or equipment malfunction Shockoe retention facility continuously manned DPU maintains a 24-hour on-call team responsible to respond to reported DWOs No new combined sewers constructed inside or outside of the existing CSS area.
Control of Solid and Floatable Materials in CSOs	<ul style="list-style-type: none"> Continuous screening provided at Shockoe retention facility for over 2/3 of CSS New combined sewer conveyance system (under construction) equipped with continuous self-cleaning solids and floatables capture facilities Solids and floatables captured are removed at source or conveyed to WWTP for removal Increased screening during leaf season/leaf pickup twice per season Regular litter and annual free citywide litter cleanup programs Regular street cleaning and downtown sidewalks scrubbing programs Regular annual catch basin cleaning program
Pollution Prevention	<ul style="list-style-type: none"> DPU has a regular public education program with facility tours including advice on proper disposal of substances (e.g., household wastes, leaves and use of fertilizer) Adopt a street and Clean City business awards programs Pretreatment program includes awareness programs that encourage industrial waste reduction through recycling and improved housekeeping DPU operates and maintains a septage receiving station Ordinances designed to prohibit entrance of any substances that may impair or damage the function and performance of collection and treatment systems
Public Notification	<ul style="list-style-type: none"> CSO control facilities under construction are expected to reduce overflows at public use/access areas of James River to an average of from 0 to 1 per year with remaining overflows expected in winter months (e.g. high river flows, little public activity). If greater CSO exposure is subsequently identified, signs to be posted for installation. Numerous public meetings and hearings have been held to provide the public information and obtain public input on the CSS, CSOs and control program Community meetings have been held to inform local groups on proposed control facilities Local press coverage of CSO program developments is continuing
Monitoring	<ul style="list-style-type: none"> Conduct flow monitoring and wet weather overflow sampling for the Shockoe Creek outfall (006) combined sewer area once per permit cycle. Report is provided to VDEQ. A twice weekly and wet weather event instream monitoring/sampling program will be conducted on the James River for dissolved oxygen, temperature, pH and fecal coliform once per permit cycle. A complete SWMM based (sewer overflow model, SOM) hydraulic model has been created for the CSS. A CSO impact model has been developed for the tidal James River (PULSEQUAL). Both models will be updated and verified using the monitoring and sampling data once per permit cycle.

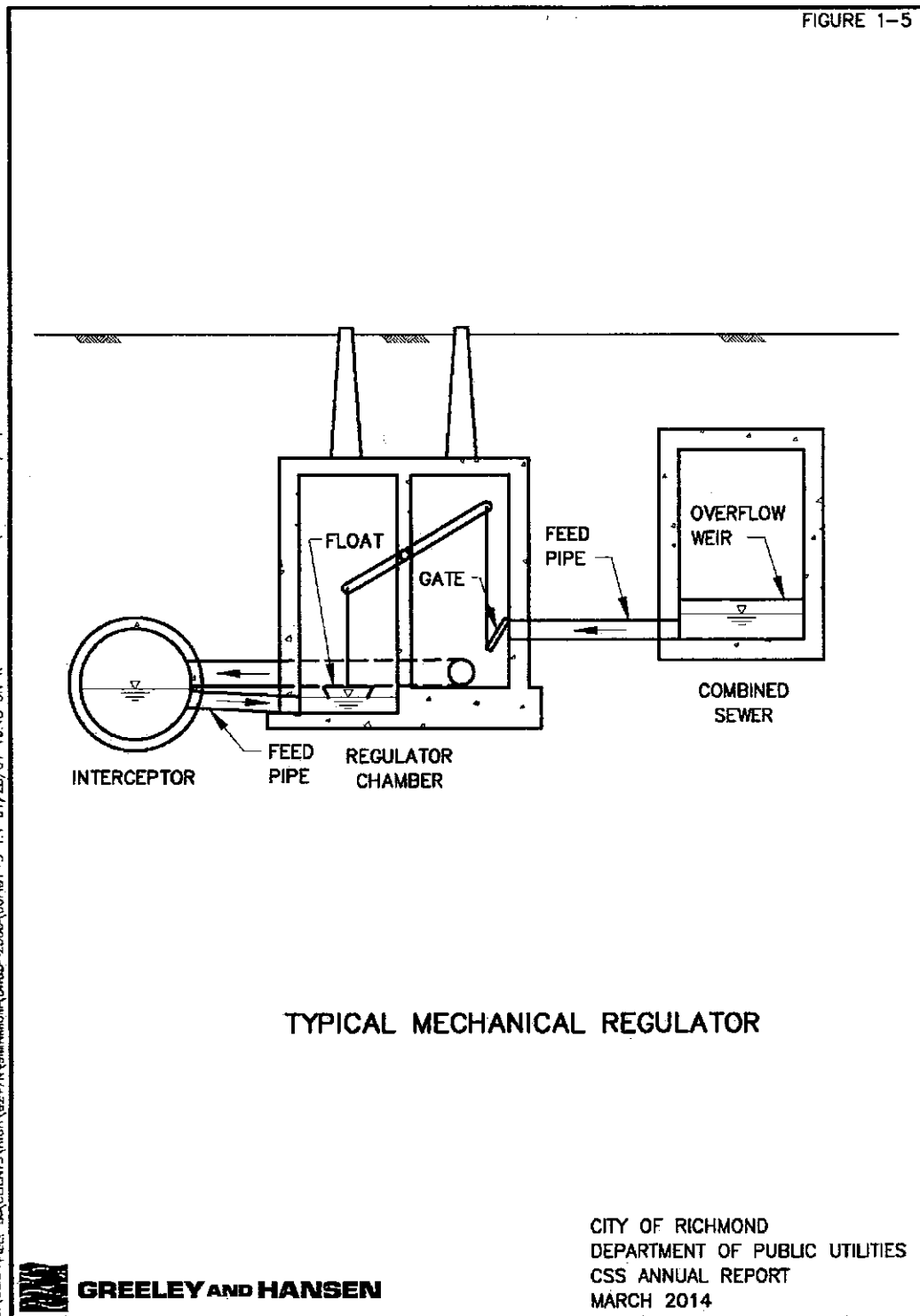
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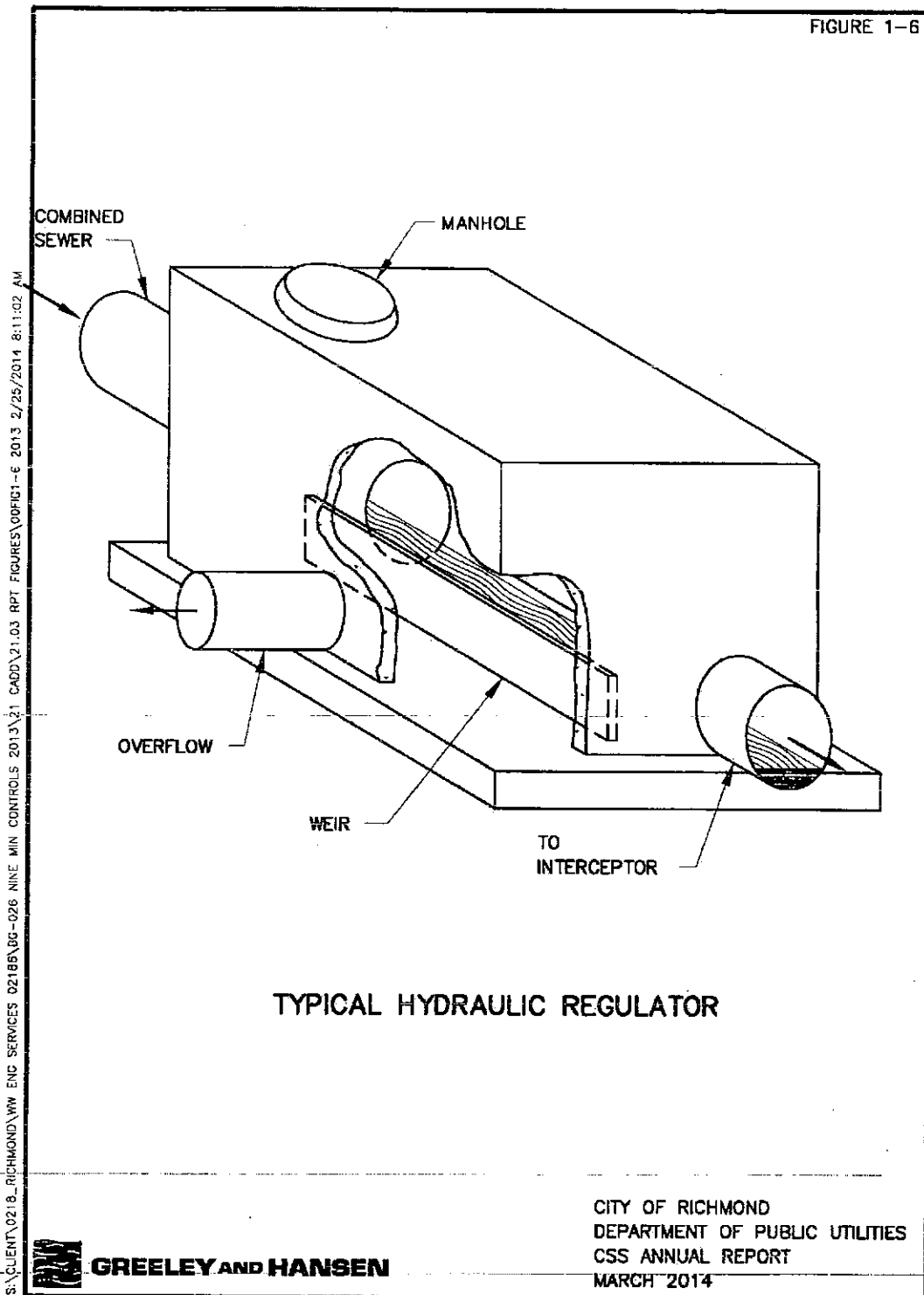
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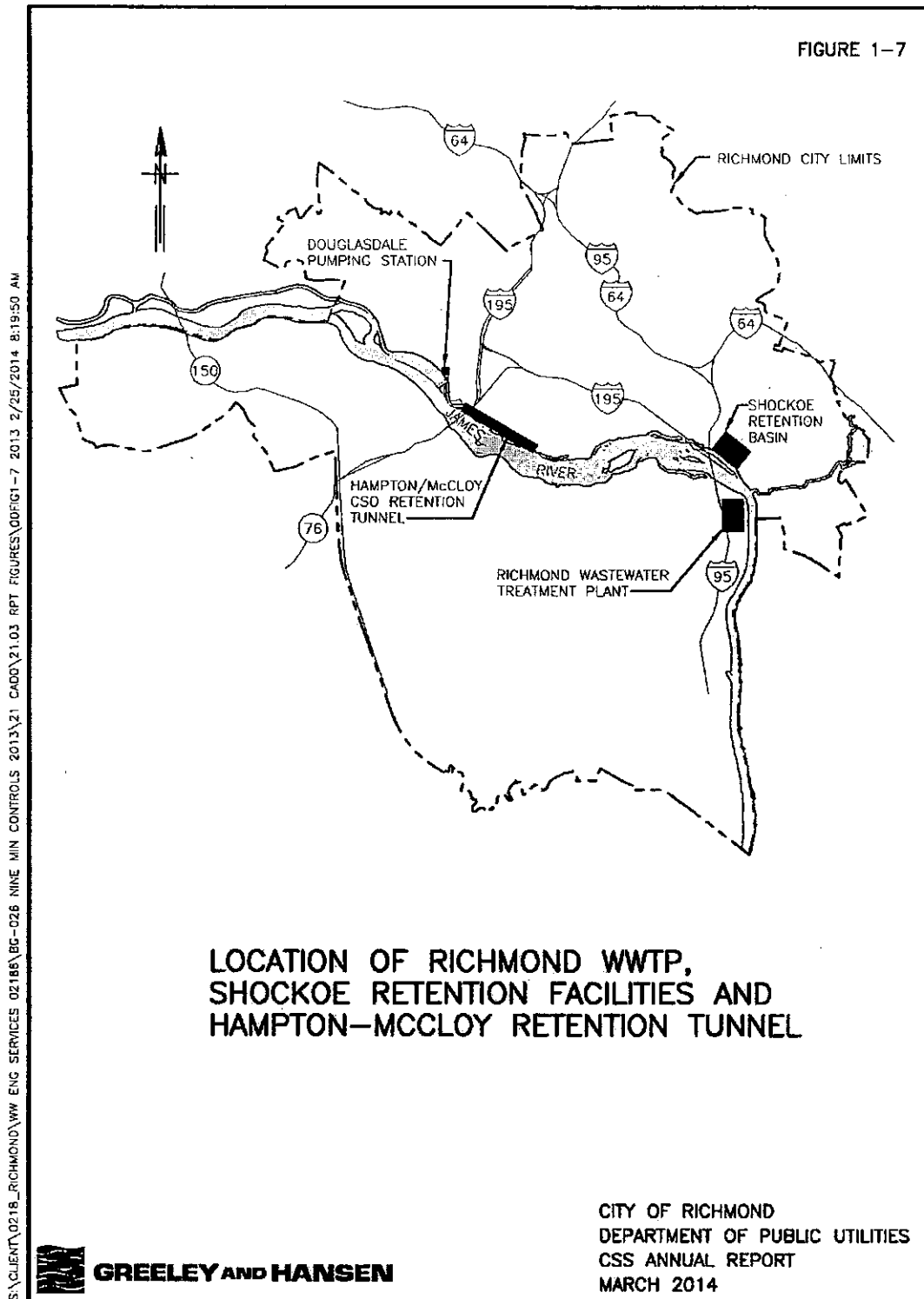
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FIGURE 1-6



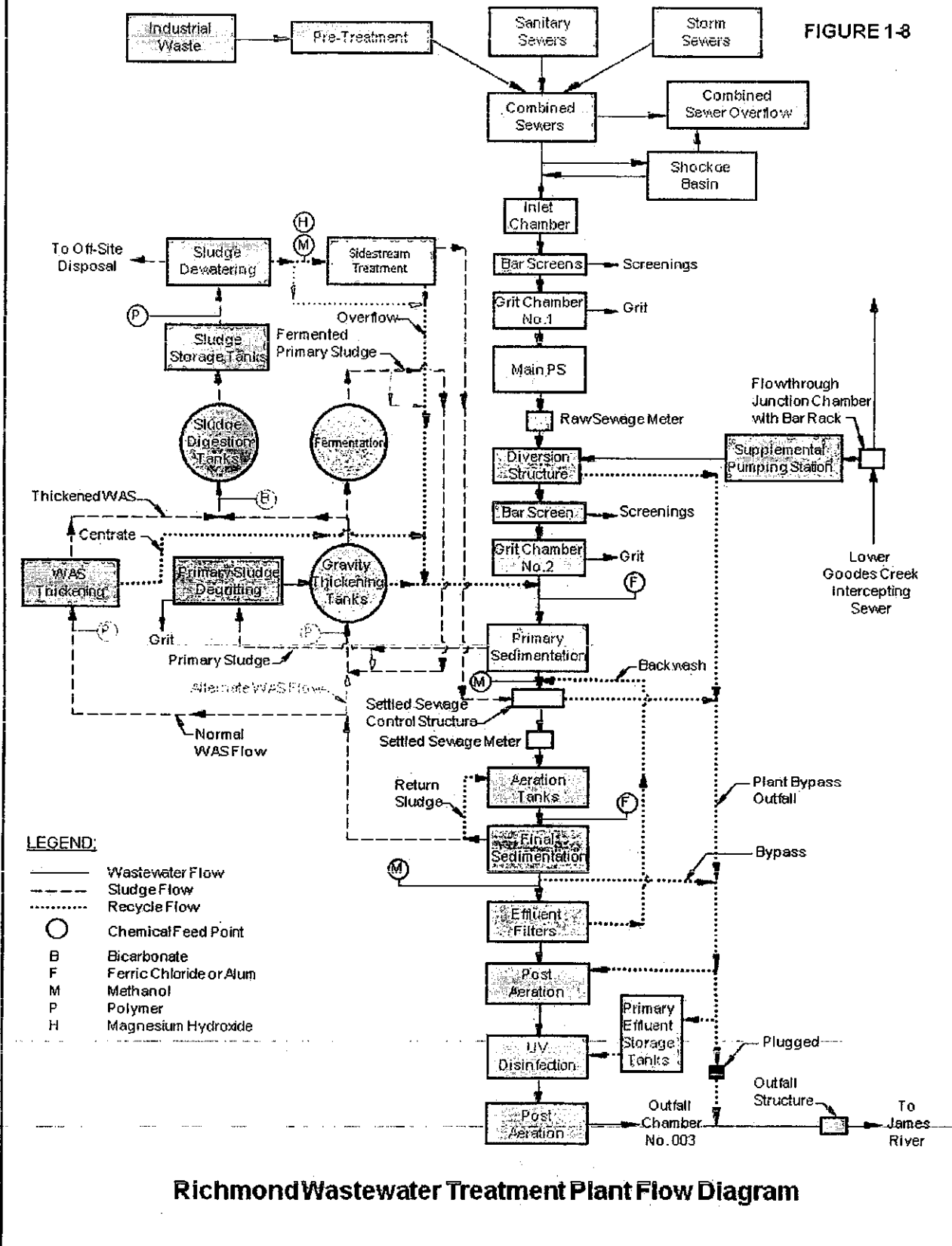
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FIGURE 1-7

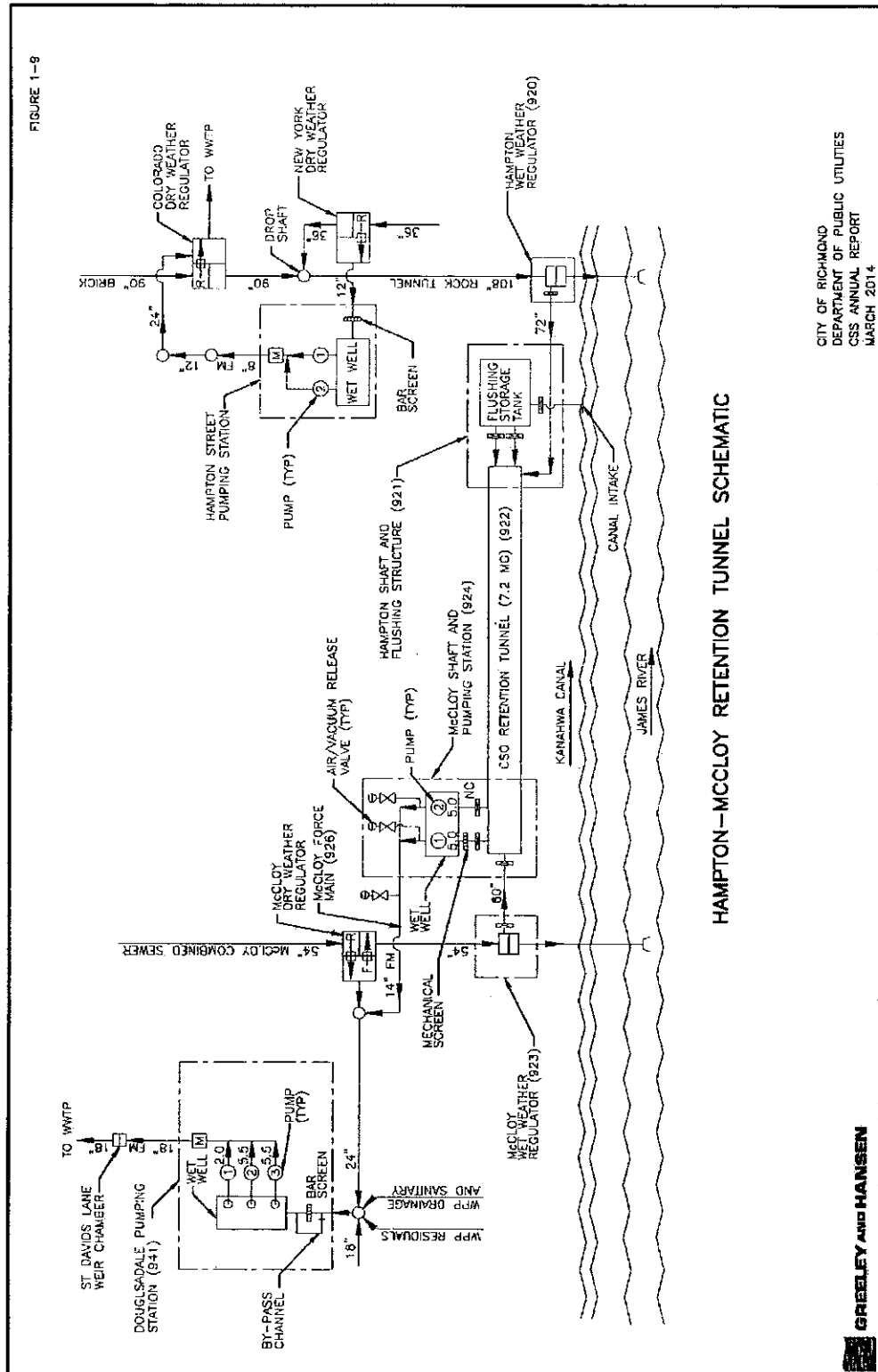


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FIGURE 1-8



Combined Sewer System Report for 2013



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Section 2 Combined Sewer Overflow Characterization

2.1 General

A sewer overflow model (SOM) of the Richmond combined sewer system (CSS) was created for the 1988 CSO Study and was upgraded in 2002 to the EPA SWMM model in the *Combined Sewer Overflow (CSO) Study, Long-Term CSO Control Plan Re-Evaluation, Final Report* – January, 2002. The model has been revalidated with information obtained from the Shockoe Creek monitoring program.

The SWMM model was updated for 2011 to include improvements to 9 CSO areas. The improvements include partial or complete separation of combined sewer areas, new solids and floatables control regulators with increased intercepting capacity, and increased inline storage. The SWMM model was updated for 2013 to include improvements to 2 CSO areas. The SWMM model was updated for the CSO areas below:

CSO ID	Type
2	Separation; Outfall Eliminated
3	Separation; Outfall Eliminated

Results of the modeled predictions for 2013 are summarized in Tables 2-1 and 2-2 and as follows:

Item	Prediction for CSS
Total Precipitation - inches	53.68
Total Overflow Volume - MG	2,875
Numbers of Rainfall Events Predicted to Result in an Overflow	73
Average Overflow per Event - MG	39.39

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Table 2-1

Summary of Precipitation and Modeled CSO Occurrences for 2013

City of Richmond

Date	Rainfall (inches)	CSO ⁽¹⁾	Date	Rainfall (inches)	CSO ⁽¹⁾
1/1/2013	0.03	no CSO	6/29/2013	0.12	CSO occurred
1/1/2013	0.23	CSO occurred	6/30/2013	0.18	CSO occurred
1/6/2013	0.03	no CSO	7/1/2013	0.45	CSO occurred
1/11/2013	0.03	no CSO	7/2/2013	0.15	CSO occurred
1/14/2013	2.34	CSO occurred	7/2/2013	0.15	CSO occurred
1/16/2013	1.58	CSO occurred	7/3/2013	0.21	CSO occurred
1/25/2013	0.12	CSO occurred	7/8/2013	0.18	CSO occurred
1/28/2013	0.21	CSO occurred	7/10/2013	1.96	CSO occurred
1/31/2013	0.76	CSO occurred	7/12/2013	0.44	CSO occurred
2/7/2013	1.16	CSO occurred	7/13/2013	0.04	no CSO
2/11/2013	0.05	no CSO	7/13/2013	0.14	CSO occurred
2/13/2013	0.12	CSO occurred	7/21/2013	1.2	CSO occurred
2/16/2013	0.18	no CSO	7/22/2013	0.15	CSO occurred
2/19/2013	0.1	CSO occurred	7/25/2013	0.04	no CSO
2/22/2013	0.25	CSO occurred	7/28/2013	0.01	no CSO
2/24/2013	0.01	no CSO	7/28/2013	0.62	CSO occurred
2/26/2013	0.73	CSO occurred	7/29/2013	0.01	no CSO
3/5/2013	2.51	CSO occurred	7/31/2013	0.41	CSO occurred
3/12/2013	0.79	CSO occurred	8/1/2013	0.65	CSO occurred
3/16/2013	0.1	no CSO	8/6/2013	1.39	CSO occurred
3/16/2013	0.33	CSO occurred	8/10/2013	0.45	CSO occurred
3/17/2013	0.73	CSO occurred	8/14/2013	0.03	no CSO
3/21/2013	0.01	no CSO	8/17/2013	1.1	CSO occurred
3/24/2013	0.77	CSO occurred	8/21/2013	0.02	no CSO
3/31/2013	0.33	CSO occurred	8/23/2013	1.78	CSO occurred
4/4/2013	0.85	CSO occurred	8/27/2013	0.01	no CSO
4/12/2013	0.2	CSO occurred	8/28/2013	2.07	CSO occurred
4/12/2013	0.04	no CSO	9/1/2013	0.06	no CSO
4/15/2013	0.04	no CSO	9/12/2013	0.48	CSO occurred
4/19/2013	0.7	CSO occurred	9/21/2013	0.85	CSO occurred
4/23/2013	0.04	no CSO	10/7/2013	0.9	no CSO
4/28/2013	0.99	CSO occurred	10/9/2013	2.74	CSO occurred
4/30/2013	0.02	no CSO	10/10/2013	0.11	no CSO
5/6/2013	0.91	CSO occurred	10/11/2013	0.19	CSO occurred
5/7/2013	0.16	CSO occurred	10/13/2013	0.26	CSO occurred
5/8/2013	0.44	CSO occurred	10/19/2013	0.03	no CSO
5/11/2013	0.17	no CSO	10/23/2013	0.01	no CSO
5/16/2013	0.03	no CSO	10/30/2013	0.01	no CSO
5/18/2013	0.53	CSO occurred	11/7/2013	0.07	no CSO
5/19/2013	0.22	CSO occurred	11/16/2013	0.29	CSO occurred
5/20/2013	0.03	no CSO	11/17/2013	0.12	CSO occurred
5/23/2013	0.01	no CSO	11/26/2013	2.58	CSO occurred
6/2/2013	0.31	CSO occurred	12/4/2013	0.06	CSO occurred
6/3/2013	0.01	no CSO	12/5/2013	0.05	CSO occurred
6/7/2013	2.67	CSO occurred	12/7/2013	0.36	CSO occurred
6/8/2013	0.44	CSO occurred	12/8/2013	1.34	CSO occurred

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6/10/2013	0.05	no CSO	12/10/2013	0.24	CSO occurred
6/10/2013	0.29	CSO occurred	12/14/2013	0.98	CSO occurred
6/13/2013	0.62	CSO occurred	12/17/2013	0.46	CSO occurred
6/17/2013	0.17	CSO occurred	12/22/2013	0.67	CSO occurred
6/18/2013	0.75	CSO occurred	12/23/2013	0.6	CSO occurred
6/22/2013	0.43	CSO occurred	12/29/2013	1.35	CSO occurred
6/26/2013	0.29	CSO occurred			

Total Precipitation: 53.68	Total CSO Occurences 73
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(1) CSO Occurred indicates a discharge at one or more outfalls; No CSO indicates no discharge at any outfall.

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Table 2-2

Summary of Modeled CSO Frequency and Volume for 2013
City of Richmond, Virginia

2013 OVERFLOW SUMMARY			
CSO Number	Basin Name	FREQUENCY	VOLUME (MG)
7	Byrd	2	0.26
9	6 th & 7th St.	0	0.00
10	Gambles Hill	2	1.40
11	Park Hydro	5	8.66
19	Hampton-NY	5	14.85
20	McCloy	3	3.58
33	Shields Lake	1	0.20
SUBTOTAL			28.95
15	Canoe Run	3	11.30
16	Woodland	1	0.04
17	Reedy Cr.	0	0.00
18	42nd St.	1	0.04
40	CSO-1 Out/SSJRP	60	163.36
SUBTOTAL			174.74
6	Shockoe	76	2,314.69
34	19th & Dock	63	69.23
SUBTOTAL			2,383.92
14	Stockton St.	20	39.29
21	Gordon Ave.	74	167.74
SUBTOTAL			207.03
2	Orleans	14	0.66
3	Nicholson	14	0.48
4	Bloody Run	48	16.68
5	Peach St.	3	0.54
24	Gillies & Varina	38	14.87
25	Briel & Gillies Cr.	39	10.04
26	Gov't Rd. & NSRR	8	1.77
28	W'Burg Rd.	15	4.64
31	Oak'Wd Cem.	7	3.22
35	29th & Dock	2	0.38
39	Gov't Rd. & Gillies	44	21.06
SUBTOTAL			74.35
12	Hilton St.	24	6.29
TOTAL CSOs (MG)			2,875.27

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Section 3 Monitoring of Shockoe Creek Outfall and James River

3.1 General

The City has implemented monitoring of the CSS for wet weather and dry weather flows. The program includes flow measurement and sampling. Additionally, the City has a river sampling program.

CSS and dry weather monitoring are conducted for the Shockoe Creek CSO area.

River monitoring is conducted in the tidal and non-tidal sections of the James River.

3.1.1 Shockoe CSO Monitoring Program

The plan for Shockoe CSO monitoring program is divided into two phases and was included in the *Appendix 3-1* of the *Combined Sewer System Annual Report for 1997*. The results of Phase 1 of the monitoring program were summarized in *Appendix 10-2* of the *CSS Documentation Report on NMC* dated December, 1996. An operating plan for Phase 2 was also presented in the same *Appendix*. Summaries of data collected in the Shockoe CSO Outlet Monitoring Program are submitted to DEQ through Progress Reports.

The sample collection for the monitoring program for Phase 2 is complete. The existing Shockoe CSO monitoring station was utilized to collect samples along with a new sampling facility at the Richmond Wastewater Treatment Plant on the Gordon Avenue Sewer. The Gordon Avenue Sewer is the next largest combined sewer in the City after the Shockoe Basin. The *Combined Sewer Overflow (CSO) Study, Long Term CSO Control Plan Re-Evaluation, Final Report* – January, 2002 contains the data analysis of water quality for Phase 2.

The City, as part of the current VPDES permit, has conducted sample collection for the monitoring program in the Shockoe CSO Sewershed to compare results with the earlier monitoring data referenced above. A final report for the monitoring program was issued on March 22, 2010.

3.1.2 James River Monitoring Program

The City continued the river sampling program that was initiated in September 1996. PULSEQUAL, a CSO impact model for the tidal James River prepared earlier, is being updated and verified using the river sampling program included in *Appendix 3-2* of the *Combined Sewer System Annual Report for 1997*. The sample collection for the James River monitoring program for Phase 2 is complete. The *Combined Sewer Overflow (CSO) Study, Long Term CSO Control Plan Re-Evaluation, Final Report* - January 2002 contains the data analysis of water quality for Phase 2.

The City as part of the VPDES permit has conducted sample collection for the monitoring program in the James River to compare results with the earlier monitoring data referenced above. A final report for the monitoring program was issued on March 22, 2010.

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Section 4 Proper Operations and Maintenance

4.1 General

The Wastewater Treatment Plant and Operations Support divisions of the Department of Public Utilities are responsible for proper operation and maintenance of the CSS. Continued measures for implementing proper O&M of the CSS are summarized in this section.

There are approximately 40 City and contract employees assigned to the CSS for sewer inspection, sewer construction and repair, sewer flushing and catch basins/inlets cleaning. These City and Contract O&M crews spend time performing operation and maintenance activities on the CSS. The CSS represents about 32 percent of the total sewer area in the City and the time dedicated to the CSS shows that the City assigns a high priority to O&M of the CSS.

Total annual sewer system expenditures for 2013 Capital Improvement Projects and O&M Projects were approximately \$16,740,000.

4.1.1 CSO Control Structures – Operations and Maintenance

The City owns and maintains tide gates, regulators and CSO outfalls for CSO control. There is a regular schedule for inspection and maintenance of each structure. The schedule of performance of the City's O&M program is as follows:

CSO Control Structures	Inspection Interval	Maintenance		Record in Appendix
		Interval	Type	
Tide Gates (3) Gordon Ave. Stockton St. Shockoe	Monthly	Monthly	Preventative Maintenance	4-1
Dry Weather Regulators (31) Wet Weather Regulators (10)	Monthly	Monthly	Preventative Maintenance	4-1
CSO Outfalls (28)	Monthly	Monthly	Preventative Maintenance	4-1

Major repairs deemed necessary at the monthly inspection are initiated by work order. The repairs are scheduled and needed parts are ordered. Major repairs may be handled by the City's maintenance department or by outside contractors depending upon the complexity of the repair.

Combined Sewer System Report for 2013

4.1.2 Pumping Stations

The City owns and maintains three pumping stations. There is a regular schedule for inspection and maintenance. Equipment inspection, screen cleaning and debris removal are part of the regular activities. Information concerning the City's Pumping Stations O&M program is summarized below:

Pump Station	Capacity (mgd)		Est. DW ⁽¹⁾ Peak (mgd)	Inspection/ Maintenance Interval	Record in Appendix
	Firm	Installed			
Douglasdale (on CSS)	7.5	13.0	2.2	Daily	4-2
Hampton (on CSS)	0.9	1.7	0.4	Daily	4-2
Upham Brook	8.6	13.0	0.3	Every Other Day	4-2
DW - Dry Weather					

4.1.3 Sewer Flushing and Cleaning

The City cleans and flushes its sewer lines at least annually, but cleans some of the lines more frequently than once per year as necessary to prevent grease and solids build-up. In 2013, the City cleaned over 244,672 linear feet of sewer lines. Debris removed during flushing and cleaning is landfilled. The City also inspects sewer lines with a video camera. In 2013, the City CCTV'd over 185,714 linear feet of sewer lines. The City owns and operates its own video equipment and also supplements its own forces with CCTV contractors. Documentation of the City's Sewer Flushing and TV program is shown in APPENDIX 4-3.

4.1.4 Catch Basin Cleaning

The City has approximately 30,000 catch basins within the City limits. This year, 2,527 were cleaned with City vacuum trucks. The City cleans approximately 1,000 catch basins in the central area more frequently on roughly a quarterly basis. Documentation of the City's Catch Basin Cleaning program is shown in APPENDIX 4-4.

4.1.5 Dry Weather Flow Study

The City has conducted a dry weather flow (DWF) study. The purpose of the study was to establish the sum base infiltration/inflow (I/I) and dry weather flow for compliance with permit limits derived from wasteload allocation evaluations. The results of this study provided bases to separate dry weather and wet weather conditions and establish when wet weather events exist in the CSS. A methodology to account for variances (increases or reductions) in DWF is currently being developed.

4.1.6 Safety and Training Programs

The City conducts regular training programs in work procedures and safety. The programs were summarized in *Appendix 2-3 of the Combined Sewer System Documentation Report on Nine Minimum Controls* dated December, 1996.

Combined Sewer System Report for 2013

Section 5 Maximize Use of Collection System for Storage

5.1 General

The CSS was operated to retain combined flow during wet weather conditions. In 2013, the City treated all flows retained in the CSS to permit limits in the WWTP. A diagram of the wastewater and combined sewer system is shown on Figure 5-1. This system includes retention basins for storage and also utilizes intercepting sewer capacity for storage. Local retention facilities provide additional stormwater storage.

5.1.1 Retention Storage

As shown in Figure 5-1, existing retention facilities in the Shockoe and Hampton-McCloy CSO areas are part of the long term CSO control plan. The Shockoe facilities serve about 8,000 acres of the CSS and comprise a 35 MG retention basin with upstream storage of about 10 MG in diversion structures and arch and box sewers. The Hampton-McCloy Retention Tunnel serves about 1,012 acres of the CSS and comprises a 7.2 MG retention tunnel.

5.1.2 Intercepting Sewer Storage

The lower sections of intercepting sewers conveying flow to the WWTP are located at elevations below the lowest CSO overflow elevation (Shockoe overflow at El. +1.00). Sewers and estimated storage are summarized below:

Intercepting Sewer	Diameter (inches)	Length Below El +1.00 (feet)	Storage Capacity (MG)
Lower Goodes Creek	72	10,905	2.61
Twin River Crossings	66	1,100	0.39
Hull Street	60	2,700	0.40
Southside CSO Conveyance ⁽¹⁾	90	4,650	1.54
Shockoe	96	2,700	1.02
Gillies Creek	60	2,500	0.37
Northside CSO Conveyance ⁽²⁾	96, 84, 60	2,850	0.89
⁽¹⁾ Southside CSO Conveyance stores CSS to an elevation of 10.0 feet			
⁽²⁾ Northside CSO Conveyance stores CSS to an elevation of 16.0 feet			

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5.1.3 Stormwater Storage

As shown on Figure 5-1, there are holding ponds located adjacent to the Brander Street and Gordon Avenue pumping stations. These ponds are part of the Richmond floodwall system and are designed to retain stormwater. There are other local stormwater holding facilities on the CSS. Examples are as follows:

- Parking lot stormwater retentions - DPU Operations Building
- Stormwater retention - State Archives Building
- Industrial Stormwater Retention as described in Section 6.1.1.

5.1.4 Sewer Relining

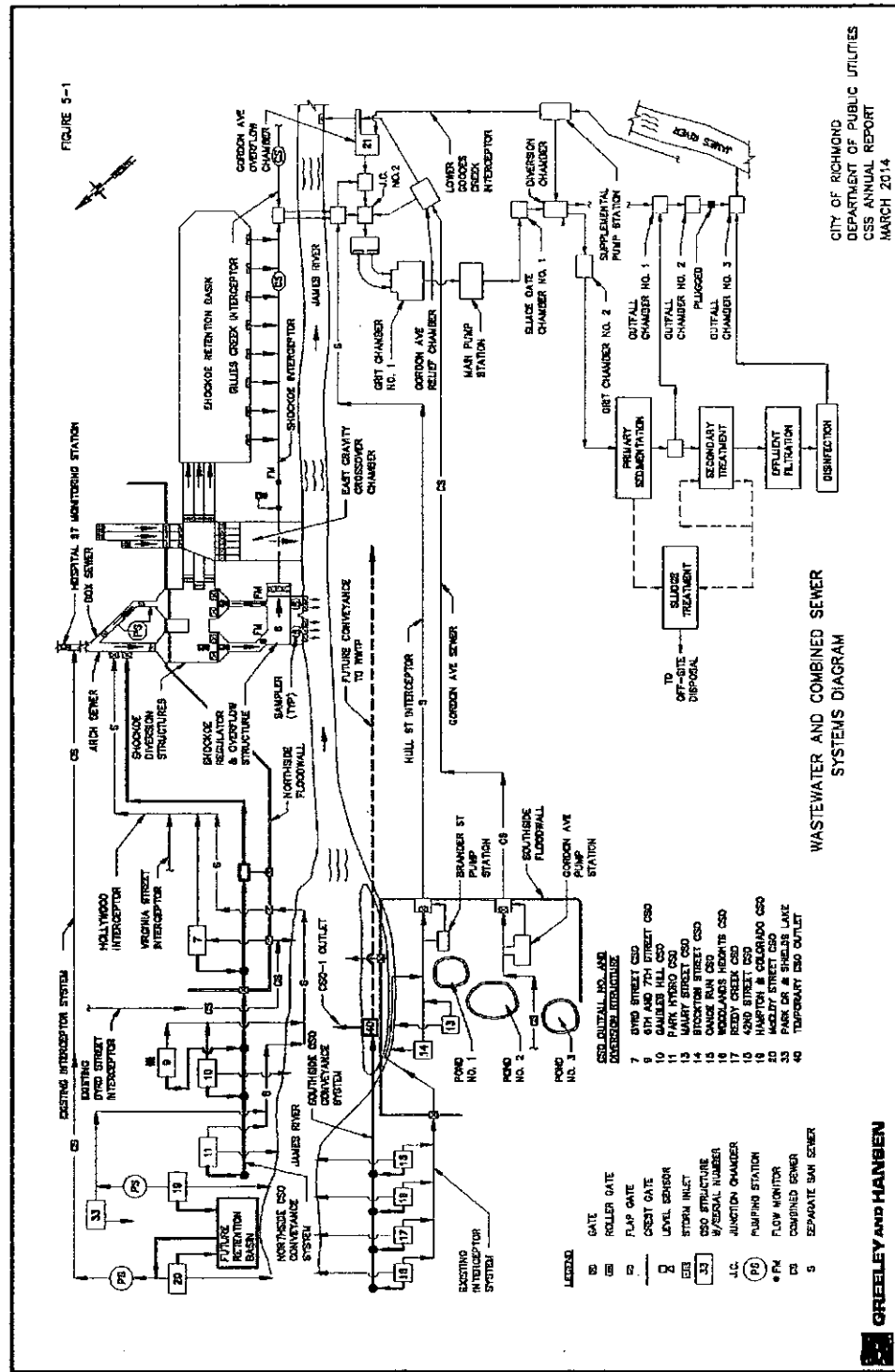
The City conducts an extensive annual sewer relining program to reduce I/I. The City lined 39,980 feet of sewer in 2013. Documentation of the City's Sewer Relining Program is summarized in APPENDIX 5-1.

5.1.5 Other

Other measures implemented to maximize storage are summarized as follows:

- Tide gates are routinely inspected and repaired to reduce tidal intrusion (see Section 4 - Proper Operations and Maintenance). The Shockoe gates were replaced in 2013.
- Ordinance prohibiting connection of roof leaders to the sanitary sewer was presented in *Appendix 5-1* of the *Combined Sewer System Documentation Report on Nine Minimum Controls* dated December 1996.

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Section 6 Review and Modify Industrial Pretreatment Requirements

6.1 General

The City administers an industrial pretreatment program as required by its VPDES permit. The City's Industrial Pretreatment Ordinance was included in *Appendix 6-1* of the *Combined Sewer System Documentation Report on Nine Minimum Controls* dated December, 1996.

6.1.1 Storm Water Retention

The following industries retain storm water on site during wet weather events and control releases until after the event for treatment to permit limits at the WWTP:

Industry Name	Location
Sonoco Products Company	Commerce Road
BP Products North America	Commerce Road
Citgo Petroleum Corporation	Maury Street
First Energy Corporation	Maury Street
Magellan Terminals Holdings, L.P. Richmond Terminal	East First Street
Transmontaigne Terminaling	Commerce Road

Each industry is issued an Industrial User Permit which includes a section on Discharge of Stormwater. A typical Industrial User Permit was included in *Appendix 6-2* of the *Combined Sewer System Documentation Report on Nine Minimum Controls* dated December, 1996.

6.1.2 Water Plant Residuals

The City's water treatment plant residuals are being dredged, dewatered, and disposed off site by a city contractor. The city dredge is used sporadically and at levels well below the maximum permitted rate and treated at the wastewater treatment plant.

6.1.3 Industrial Impact

CSO modeling and wastewater sample analysis do not indicate any impacts attributed to non-domestic resources.

Combined Sewer System Report for 2013

Section 7 Maximize Flow to the POTW for Treatment

7.1 General

The City has continued its program for maximizing flow to the WWTP during wet weather conditions. Essential elements of the program are summarized below:

- The CSS is designed to permit diversion in excess of three (3) times DWF to the WWTP as noted on Table 7-1.
- Flow stored in the Shockoe Retention System and the Hampton-McCloy Retention Tunnel is treated at a rate of no less than 75 mgd and the system is emptied within 48 hours after CSO conditions cease to exist.
- Treatment rates at the WWTP are increased during wet weather conditions.
- Flows of at least 75+ mgd at the WWTP are treated to permit limits.

Table 7-1
CSO Regulator Diversion Capacities

CSO No.	Designation	EST. DWF ¹ mgd	REG CAP ² mgd	CAP Ratio = ----- DWF
Northside James River Park CSO Area				
007	Byrd Street	0.06	3.50	58.3
008	Sixth Street	0.09	3.32	36.9
009	Seventh Street	0.05	1.30	26.0
010	Gambles Hill	0.23	1.90	8.3
011	Park Hydro	0.65	14.33	22.0
Southside James River Park CSO Area				
015	Canoe Run	0.89	5.54	6.2
016	Woodland Heights	0.15	1.83	12.2
017	Reedy Creek	0.40	9.98	25.0
018	42nd Street	0.26	1.24	4.8
Hampton Street CSO Area				
033	Shields Lake	0.08	11.38	142.3
019	Hampton St			
019a	Hampton St & Colorado Ave	0.58	0.86	1.5
019b	Hampton St & New York Ave	0.58	5.67	9.8

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CSO No.	Designation	EST. DWF ¹ mgd	REG CAP ² mgd	CAP Ratio = $\frac{\text{CAP}}{\text{DWF}}$
McCloy Street CSO Area				
020	McCloy Street	0.40	4.87	12.2
Manchester CSO Area				
014	Stockton Street	0.69	17.00	24.6
021	Gordon Avenue	1.22	6.24	5.1
Gillies Creek CSO Area				
002	Orleans Street/Removed	0.09	1.05	11.7
003	Nicholson Street/Removed	0.05	0.94	18.2
004	Bloody Run	0.20	3.48	17.4
005	Peach Street	0.04	6.23	155.8
024	Gillie & Varina Streets	0.25	2.30	9.2
025	Briel Street & Gillies Creek	0.40	3.90	9.8
026	Gov't Road & NSRR	0.22	2.40	10.9
028	Williamsburg Road			
028a	Williamsburg Road & Hatcher St	0.027	2.22	82.2
028e	Carlisle & Orleans	0.06	0.84	14.0
031	Oakwood Cemetery	0.38	20.0	52.6
035	29th & Dock Streets			
035a	25 th & E Main	0.05	4.51	90.2
035b	25 th & E Cary	0.05	2.03	40.6
039	Gov't Road & Gillies Creek	0.30	3.20	10.7
Shockoe Creek CSO Area				
006	Shockoe Creek	16.75	51.00	3.0
034	19th & Dock Streets	0.29	5.25	18.1
Hilton Street CSO Area				
012	Hilton Street	0.20	2.20	11.0

¹ Estimated average daily dry weather flow.

² Regulator diversion capacity to intercepting sewer without overflow. Revised per model in Combined Sewer Overflow Study (CSO), Long-Term CSO Control Plan Evaluation, Final Report, January 2002 and completed Phase III CSO Projects including solids and floatable control regulator projects for CSO 024, 025, 026, 039, 012 and 031 and Maury Street Separation Project (which closed CSO 013 outfall in 2011) and the Orleans Street and Nicholson Street projects, which closed CSOs 002 and 003 in May, 2013.

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The Richmond Wastewater Treatment Plant is being upgraded to comply with the existing Richmond VPDES Permit limitations and the new nutrient waste load allocations. During the upgrades many existing processes are affected by the sequencing of the work. The City has been operating, to the maximum extent and duration practical, its WWTP to provide treatment to flow rates above 50 MGD.

Combined Sewer System Report for 2013

Section 8 Eliminate Dry Weather Overflows

8.1 General

The CSS retention and diversion facilities and pumping stations are regularly maintained (see Section 4 - Proper Operations and Maintenance) to prevent dry weather overflows. The Shockoe retention facilities are continuously manned. The Hampton-McCloy Retention Tunnel is operated remotely from the WWTP with regular inspections.

The CSS diversion facilities are all designed to convey to the WWTP flow rates that are substantially in excess of dry weather conditions as shown in Table 7-1.

Blockages or other circumstances can result in dry weather discharges from the CSS. Some discharges may occur occasionally in the system or at combined sewer outfalls as a consequence of blockages or damaged properties and are reported in accordance with the VPDES permit.

The City maintains an "on call" team of maintenance personnel to respond to blockages or other occurrences that could result in dry weather discharges. The "on call" team responds to incidents relayed by duty personnel. "On call" maintenance personnel have been trained in maintenance and corrective action procedures required for CSS retention and diversion facilities and pumping stations.

Combined Sewer System Report for 2013

Section 9 Control of Solid and Floatable Material in CSOs

9.1 General

Measures implemented to control solid and floatable material in CSOs are summarized as follows:

- The Shockoe Retention Facilities and the Hampton-McCloy Retention Tunnel provide continuous mechanical screening. The Shockoe Retention Facilities provides screening for over two-thirds of the CSS. The Hampton-McCloy Retention Tunnel screens an additional 1,012 acres of the CSS. Estimated average annual overflow for the CSS was summarized in *Table 7-1* of the *CSS Documentation Report on Nine Minimum Controls* dated December, 1996. The Shockoe Retention Facilities screen approximately 58 percent of the total flow generated in the CSS.
- The construction of the Northside and Southside James River Park CSO conveyance facilities are completed and include flotation or stilling chambers and/or static screens along with baffles to capture solid and floatable material. The material captured is transferred to the intercepting sewers for removal at the WWTP.
- The Hampton-McCloy Retention Tunnel for the McCloy and Hampton CSOs is equipped with solid and floatable capture chambers. All flow captured in the retention tunnel is screened prior to transfer to the WWTP.
- All flow captured in retention facilities in 2013 was transferred to the WWTP for complete treatment.
- All increase in flow received at the WWTP during wet weather events in 2013 (e.g. all flow above the nominal DWF of 45 mgd) received complete treatment.
- Screening operations at the Shockoe Retention Facilities are increased during leaf season.
- The City's Department of Public Works continued to conduct a loose leaf collection program. The program is summarized in APPENDIX 9-1. The City's packaged leaf and yard waste program was combined with regular household waste collections after May, 2000.
- The City's Department of Public Utilities continues to document a regular catch basin cleaning program. See Section 4, Proper Operations and Maintenance.
- The City's Department of Public Works continues to document regular litter control program. See Section 10, Pollution Prevention.
- The City's Department of Public Works continues and document regular street cleaning. See Section 10, Pollution Prevention.

The foregoing programs provide capture and removal of solid and floatable material that would otherwise be discharged at CSO outlets during wet weather events.

Combined Sewer System Report for 2013

Section 10 Pollution Prevention

10.1 General

Pollution prevention programs and currently ongoing activities performed by the City are summarized as follows:

- The WWTP conducts periodic facility tours for public groups, (e.g., grade and high school classes, civic and environmental organizations, college classes, medical groups, Girl and Boy Scout troops). On each tour the plant treatment process and the combined sewer system are explained. Proper disposal of household wastes, leaves, and use of fertilizer are also reviewed during tours. Two tours were conducted in 2013. Documentation of the City's facility tours is shown in APPENDIX 10-1.
- The City's Adopt-a-Spot/Street program recognizes citizens, civic, and merchant associations for maintaining areas of the City. Over 38 areas have been adopted. Documentation of the City's Adopt-a-Spot/Street program is shown in APPENDIX 10-2.
- Industries are required to retain storm water onsite during wet weather events for later release to the WWTP for treatment (see Section 6 - Review and Modify Industrial Pretreatment Requirements).
- The City continues to operate a septage hauler dumping station at Brander Street Pumping Station. The septage hauler connects his tank truck to the dump station and septage is metered as it is unloaded. Septage is screened at this station and all waste flows to the WWTP for treatment to permit levels. The Environmental Compliance Officer at the Richmond WWTP maintains a list of haulers and typical surcharge volume data. A new septage hauler dumping station was completed in 2011 and is now in operation.
- The City collects trash from waste baskets located around the City daily. Documentation of trash collection is shown in APPENDIX 10-3.
- The City conducts a street cleaning program, which removes over 15,750 tons of debris during street sweeping of over 17,060 lane miles of the City's streets. See APPENDIX 10-4 for documentation of this activity.
- The City has contracted to private agencies a regular schedule of street scrubbing in the downtown area.
- The City of Richmond hosted a dedication for a new household hazardous waste facility on March 3, 2008 at the East Richmond Road Convenience Center. Disposal of household hazardous waste items was open to City of Richmond residents only (no businesses). Household hazardous waste items accepted are solvents, paints, fuels, propane tanks, car fluids, batteries, cooking oil. The East Richmond Road Convenience Center at 3800 East Richmond Road accepts household hazardous waste from 7:00 a.m. to 4:30 p.m. weekdays and from 9:00 a.m. to 2:00 p.m. on Saturdays.
- The City has a Pet Waste Collection program in the James River Park-Reedy Creek area.

Combined Sewer System Report for 2013

Section 11 Public Notification

11.1 General

During preparation of its long term CSO control plan (Project D-1 from 1988 CSO Study), the City conducted an extensive public notification and participation program. Following adoption of Project D-1 by City Council, the Study was reviewed by the Virginia Department of Environmental Quality (VDEQ). During VDEQ review, the Virginia Water Control Board (VWCB or Board) held several public meetings/hearings on the proposed plan and in March, 1989, the Board approved the City's long-term CSO control plan.

Over the course of public notification and involvement, hundreds of people were made aware of the CSS and efforts being made to control wet weather situations. Principal public agencies and interest groups actively involved in the process included the following:

- Richmond City Council
- Richmond Departments of Public Utilities and Parks
- Virginia Water Control Board
- Virginia Department of Environmental Quality
- USEPA, Region III
- Falls of the James Scenic River Advisory Committee
- Chesapeake Bay Foundation
- Environmental Defense Fund
- Lower James River Association
- Southern Environmental Law Center
- Neighborhood and Recreational Groups

11.1.1 CSO Warning Signs

Twenty-two (22) of twenty-eight (28) CSOs were predicted to discharge, on an average, more than once per summer and therefore, each of them required a CSO warning sign per the VPDES permit. These signs were erected, and are maintained by DPU, Wastewater Division.

11.1.2 CSO Control Plan Public Notification and Participation

The program conducted by the City was diagramed on Figure 11-1 and is summarized in *Appendix 11-1* of the *CSS Documentation Report on Nine Minimum Controls* dated December, 1996.

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11.1.3 Regulatory Agencies Public Process

Public activities and involvement during regulatory agency review and approval process leading to implementation of the City's CSO control plan was diagrammed on *Figure 11-2* of the *Combined Sewer System Annual Report* for 1997.

During 2013, the City participated in the following meetings with regulatory agencies:

Agency	Subject
DCR	TMDL – Chesapeake Bay
Virginia DEQ	TMDL – James River Bacteria Water Quality Standards Coordination Integrated Planning James River Chlorophyll A Study
Corps of Engineers	CSO Program Review Flood Wall Review Shockoe Bottom Drainage

11.1.4 Community Meetings

The City meets with local community (neighborhood) groups on an as needed basis to provide information on activities involving CSO control projects. During 2013, the City held the following Citizen Input and Community Meetings:

- 9/14 /2013 – Household Hazardous Waste Collection – Hazardous Waste
- 9/26/13 – St Albans Church - Storm Water Credits
- 10/15/2013 – Bellemeade Church – Install Rain Barrels
- 10/22/2013 – Citizen's Academy – Storm Water Education
- 10/27/2013 – Bluff's Condominium Group – Pet Waste
- 10/28/2013 – Forest Hill Bliley Neighborhood Assn. - Storm Water Credits
- 11/11/2013 – Mosby Tenet Assn. – Pet Waste, Illicit Discharge
- 11/12/2013 – Cherry Garden Civic Assn. – Storm Water Education
- 11/21/2013 – Brookberry Civic Assn. - Storm Water Credits
- 12/5/2013 – Unity Civic Assn. - Storm Water Credits
- 12/9/2013 – Hickory Hill Civic Assn. – Pet Waste, Illicit Discharge, Pet Waste
- 12/13/2013 – Blessing of the Animals – Pet Waste
- 9/4/2013 – Richmond Animal Control – Pet Waste
- 8/15/2013 – COR Storm Draining Cleaning – Recycling, Illicit Discharge
- 8/29/2013 – COR Storm Draining Cleaning – Recycling, Illicit Discharge
- 1/10/2013 – Lucille Brown Middle School - Storm Water Education
- 2/7/2013 – Richmond Animal Control – Pet Waste
- 2/5/2013 – VCU Students – Storm Water Education, Illicit Discharge
- 2/3/2013 – 2nd Precinct MPACT Meeting - Storm Water Education
- 2/22/2013 – COR Health and Safety Fair - Storm Water Education
- 10/12/2013 – Reedy Creek Coalition - Storm Water Education
- 8/11/2013 – Watermelon Festival – Storm Water Education

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9/20/2013 – Oktoberfest – Storm Water Education

9/21/2013 – Children’s Hospital Run - Storm Water Education

10/3/2013 – Carytown Wine and Food Festival - Storm Water Education

11.1.5 Local Press Coverage

Newspaper coverage of the CSS is ongoing. Examples of public information being provided were summarized in *Appendix 9-2 of the CSS Documentation Report on Nine Minimum Controls* dated December, 1996. The City’s webpage documents coverage at its “News Releases and Videos” page located at: <http://www.richmondgov.com/PublicWorks/NewsReleasesVideos.aspx>.

11.1.6 CSO Overflow Reporting

The City maintains a program that enters monthly rainfall data into the City’s dynamic hydrologic model of the city’s sewer collection system. The model can predict CSO events due to rainfall by location, magnitude and duration of CSO events. The City provides the model results, presented in tables and charts, which are uploaded monthly to the City’s CSO webpage. The CSO webpage also provides charts of historic data for each CSO location, along with the current data. The information provided can assist the public with event planning. The 2013 graphs of the overflow frequency by month for each CSO overflow point are shown in APPENDIX 11-2.

11.1.7 CSO Public Notification:

The City maintains a web based notification of CSO events in real time based on rainfall readings. A citizen can subscribe to the notification on the City’s Department of public utilities web site. CSO notification was sent to the registered e-mail addresses of citizens.

11.1.8 CSO Web Animation:

The City maintains a 3D visual graphic presentation of the major components of the combined sewer collection system for the purpose of public education. The 3D graphics are animated and narrated to describe to the viewer the dynamic process of collecting and managing combined sewer flow. The animation shows the viewer sources of combined sewer including residential and rainfall dependent inflow and infiltration. The animation demonstrates the fundamental operation of a sewer flow regulator and how a CSO can occur. Specific facilities within the City’s collections system are highlighted, including the Hampton/McCloy CSO Retention Tunnel and the Shockoe Retention Basin and Outfall. The City’s 100 year floodplain is also featured as an animated segment.

The 3D visual graphic presentation is available to the public through the City’s CSO webpage. The direct link is: <http://www.richmondgov.com/PublicUtilities/projectCombinedSewerOverflow.aspx>. The animation is presented in short, easily viewed segments. The webpage includes an interactive map that a visitor may click on to display different segments of the animation. This interactivity invites a visitor to view the animated segments in a specific order or allow the visitor the flexibility to view whichever segment they choose. The City uploaded this to the City’s CSO webpage in 2009.

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Section 12 Monitoring

12.1 General

The City of Richmond installed 7 sewer flow meters and 2 rain gauges during the Shockoe CSO Monitoring Program. The City of Richmond has initiated a sewer flow monitoring program that includes 14 additional sewer flow meters and 4 additional rain gauges. The 4 rain gauges and 10 new sewer flow meters have been installed as of March 2013. The remaining meters are slated for installation by 2015. When installation has been completed, the city will have 21 flow meters and 6 rain gauges collecting data on a continuous basis.

See Section 3, Monitoring of Shockoe Creek Outfall and James River, for details relative to the Shockoe CSO Monitoring program and James River Sampling and Monitoring program.

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APPENDICES

Combined Sewer System Report for 2013

APPENDIX 4-1

Tide Gate, Regulators and CSO Outfalls



City of Richmond

Department of Public Utilities - Wastewater Treatment Plant

CSO Controls Structures Monthly Inspection Summary

Year: 2013 Month: January Signature: [Signature] M. Smith

CSO #	CSO Name	Receiving Water	Type Device	Inspection Date	PM Date	Services Performed
Gillies Creek CSO Area						
2	Orleans Street	James River	R	1/11/13		CLEAN REGULATOR w/ NO BYPASS
3	Nicholson Street	James River	R	1/11/13		CLEAN REGULATOR w/ NO BYPASS
4	Bloody Run	Gillies Creek	R	1/11/13		CLEAN REGULATOR w/ NO BYPASS
5	Peach Street	James River	R	1/11/13		CLEAN REGULATOR w/ NO BYPASS
20	Old Fulton Street Bridge	Gillies Creek	R	1/15/13		GATE CLOSED NO GROUND WATER
21	Gillie and Varina Streets	Gillies Creek	R	1/15/13		REGULATOR NORMAL FLOW w/ NO BYPASS
22	Briel Street & Gillies Creek	Gillies Creek	R	1/11/13		REGULATOR NORMAL FLOW w/ NO BYPASS
23	Gov't Road and NSRR	Gillies Creek	R	1/11/13		REGULATOR NORMAL FLOW w/ NO BYPASS
24	New Williamsburg Road	Gillies Creek	R	1/11/13		GATE CLOSED NO GROUND WATER
25	Williamsburg Road	Gillies Creek	R	2/14/13		NO OVER FLOW FROM CSO LINE
26	Oakwood Cemetery	Stoney Run	R	2/14/13		CLEAN REGULATOR w/ NO BYPASS
27	29th and Dock Street	Richmond Dock Canal	R	2/15/13		NEEDS CLEANING - NO ROAD
28	Gov't Road & Gillies Creek	Gillies Creek	R	2/15/13		REGULATOR NORMAL FLOW w/ NO BYPASS
Hilton Street CSO Area						
12	Hilton Street	Almond Creek	R	1/10/13		REGULATOR NORMAL WITH NO BYPASS
Miscellaneous Structures						
	Odor Room Canal Walk	Odor Control System		1/15/13		TANK AND BLOWER NORMAL w/ NO BYPASS
	14th & Semmes Ave		PS	1/15/13		DAILY INSPECTION
	Cary & Maple Ave.	Main Connection to Henrico Co.				NO WATER IN LINE
	Maryland Ave.	Connection to Henrico Co.		1/14/13		NO WATER IN LINE
	Seminary Ave.	Connection to Henrico Co.		1/14/13		NO WATER IN LINE
	Pine Alley	Drain Boxes		1/10/13		NO WATER STANDING IN DRAIN BOX

Type Device: R = Regulator TG = Tide Gate W = Weir TF = Transfer Facility RO = River Outfall PS = Pump Station



City of Richmond

Department of Public Utilities - Wastewater Treatment Plant

CSO Controls Structures Monthly Inspection Summary

Year: 2013

Month: January

Signature: *[Signature]* M. Smith

CSO #	CSO Name	Receiving Water	Type Device	Inspection Date	PM Date	Services Performed
Hampton Street CSO Area						
33	Shields Lake	Dooley Branch	W	1/8/13		NO WATER OVER WEIRS
19	Hampton - Colorado		R	1/8/13		NORMAL REGULATION w/NO BYPASS
19	Hampton - New York	James River	R	1/8/13		NORMAL FLOW w/NO BYPASS
McCloy Street CSO Area						
20	McCloy Street		R & TF	1/10/13		REGULATOR IS NORMAL - TO STATION
Northside James River Park CSO Area						
11	Park Hydro	James River	R & TF	1/10/13		NORMAL FLOW IN REGULATOR
10	Gambles Hill	Haxall Canal	R & TF	1/10/13		NO WATER OVER WEIRS
9	7th Street	Haxall Canal	R & TF	1/10/13		NORMAL FLOW
8	8th Street	Haxall Canal	R & TF	1/10/13		NORMAL FLOW TO 7th ST. REGULATOR
7	Byrd Street	James River	R & TF	1/10/13		NO OVER FLOW FROM CSO LINE
Southside James River Park CSO Area						
18	42nd Street	James River	R & TF	1/9/13		NORMAL FLOW WITH NO BYPASS
17	Reedy Creek	James River	R & TF	1/9/13		NORMAL FLOW WITH NO BYPASS
16	Woodland Heights	James River	R & TF	1/9/13		NORMAL FLOW w/NO BYPASS
15	Canoe Run	James River	R & TF	1/9/13		NORMAL FLOW w/NO BYPASS
40	CSO-1 OUT/SSJRP	James River	RO	1/9/13		NO OVER FLOW FROM CSO LINE
Shockoe Creek CSO Area						
6	Shockoe Creek	James River	TG	1/10/13		BAR RACK IS CLEAN ALL GATES CLOSED
34	19th and Dock Street	Richmond Dock Canal	R	1/10/13		NO OVER FLOW FROM CSO LINE
Wastewater Treatment Plant CSO Area						
14	Stockton Street	Manchester Canal	R	1/10/13		NORMAL FLOW WITH NO BYPASS
13	Maury Street	Manchester Canal	R	1/10/13		NO FLOW TO TIDE REGULATOR
21	Garden Avenue	James River	R	1/11/13		NORMAL FLOW TO PLANT WITH NO BYPASS

Type Device: R = Regulator TG = Tide Gate W = Weir TF = Transfer Facility RO = River Outfall PS = Pump Station



City of Richmond

Department of Public Utilities - Wastewater Treatment Plant

CSO Controls Structures Monthly Inspection Summary

Year: 2013

Month: FEBRUARY

Signature: *Michael Smith* (HT)

CSO #	CSO Name	Receiving Water	Type Device	Inspection Date	PM Date	Services Performed
Gillies Creek CSO Area						
2	Orleans Street	James River	R	2/12/13		CLEAN REGULATOR w/NO BYPASS
3	Nicholson Street	James River	R	2/12/13		REGULATOR CLEAN w/NO BYPASS
4	Bloody Run	Gillies Creek	R	2/12/13		REGULATOR CLEAN w/NO BYPASS
5	Peach Street	James River	R	2/12/13		CLEAN REGULATOR w/NO BYPASS
23	Old Fulton Street Bridge	Gillies Creek	R	2/11/13		GATE CLOSED, NO GROUND WATER
24	Gillie and Varina Streets	Gillies Creek	R	2/11/13		REGULATOR CLEAN, NORMAL FLOW w/NO BYPASS
25	Brier Street & Gillies Creek	Gillies Creek	R	2/11/13		NORMAL FLOW w/REGULATOR w/NO BYPASS
26	Govt Road and NSRR	Gillies Creek	Cleaned R	2/11/13	2/12/13	STOPPED UP (GROSS CRIME) REGULATOR NORMAL FLOW w/NO BYPASS
27	New Williamsburg Road	Gillies Creek	R	2/11/13		GATE CLOSED, NO GROUND WATER
28	Williamsburg Road	Gillies Creek	R	2/11/13		NO OVER FLOW FROM CSO LINE
31	Oakwood Cemetery	Stoney Run	R	2/11/13		CLEAN REGULATOR w/NO BYPASS
35	29th and Dock Street	Richmond Dock Canal	R	2/11/13		NEED CLEANING / NO ROAD
39	Govt Road & Gillies Creek	Gillies Creek	R	2/11/13	CLEANED 4/13	REGULATOR NORMAL FLOW w/NO BYPASS
Hilton Street CSO Area						
12	Hilton Street	Almond Creek	R			REGULATOR NORMAL w/NO BYPASS
Miscellaneous Structures						
	Odor Room Canal Walk	Odor Control System		2/7/13		Blower and Tank NORMAL
	14th & Semmes Ave		PS	2013		Daily Inspection
	Cary & Maple Ave.	Main Connection to Henrico Co.		2/7/13		NO WATER in Line
	Maryland Ave.	Connection to Henrico Co.		2/7/13		NO WATER in Line
	Seminary Ave.	Connection to Henrico Co.		2/7/13		NO WATER in Line
	Pine Alley	Drain Boxes		2/7/13		NO WATER Standing in Drain Box

Type Device: R = Regulator TG = Tide Gate W = Weir TF = Transfer Facility RO = River Outfall PS = Pump Station



City of Richmond

Department of Public Utilities - Wastewater Treatment Plant

CSO Controls Structures Monthly Inspection Summary

Year: 2013

Month: FEBRUARY

Signature:

[Signature] Michael Smith

CSO #	CSO Name	Receiving Water	Type Device	Inspection Date	PM Date	Services Performed
Hampton Street CSO Area						
33	Shields Lake	Dooley Branch	W	2/8/13		NO WATER OVER WEIRS
19	Hampton - Colorado		R	2/8/13		NORMAL REGULATOR w/ NO BYPASSES
19	Hampton - New York	James River	R	2/8/13		NORMAL Flow with NO BYPASSES
McCloy Street CSO Area						
20	McCloy Street		R & TF	2/8/13		REGULATOR IS NORMAL TO STATION
Northside James River Park CSO Area						
11	Park Hydro	James River	R & TF	2/19/13		NORMAL Flow in REGULATOR
10	Gambles Hill	Haxall Canal	R & TF	2/19/13		NO WATER OVER WEIRS
9	7th Street	Haxall Canal	R & TF	2/19/13		NORMAL Flow
8	8th Street	Haxall Canal	R & TF	2/19/13		NORMAL Flow TO 7TH STREET REGULATOR
7	Byrd Street	James River	R & TF	2/19/13		NO OVERFLOW FROM CSO LINE
Southside James River Park CSO Area						
18	42nd Street	James River	R & TF	2/8/13		NORMAL Flow with NO BYPASSES
17	Reedy Creek	James River	R & TF	2/8/13		NORMAL Flow w/ NO BYPASSES
16	Woodland Heights	James River	R & TF	2/8/13		NORMAL Flow w/ NO BYPASSES
15	Canoe Run	James River	R & TF	2/8/13		NORMAL Flow with NO BYPASSES
40	CSO-1 OUT/SSJRP	James River	RO	2/8/13		NORMAL - NO OVERFLOW FROM CSO LINE
Shockoe Creek CSO Area						
6	Shockoe Creek	James River	TG	2/8/13		BAR RACK IS CLEAN AND ALL GATES CLOSED
34	19th and Dock Street	Richmond Dock Canal	R	2/8/13		NO OVERFLOW FROM CSO LINE
Wastewater Treatment Plant CSO Area						
14	Stockton Street	Manchester Canal	R	2/20/13		NORMAL Flow with NO BYPASSES
13	Maury Street	Manchester Canal	R	2/20/13		NO Flow TO THE REGULATOR
21	Garden Avenue	James River	R	2/20/13		NORMAL Flow TO PLANT w/ NO BYPASSES

Type Device: R = Regulator TG = Tide Gate W = Weir TF = Transfer Facility RO = River Outfall PS = Pump Station



City of Richmond

Department of Public Utilities - Wastewater Treatment Plant

CSO Controls Structures Monthly Inspection Summary

Year:

2013

Month:

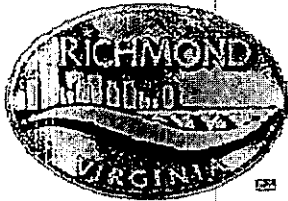
March

Signature:

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CSO #	CSO Name	Receiving Water	Type Device	Inspection Date	PM Date	Services Performed
Gillies Creek CSO Area						
2	Orleans Street	James River	R	3/6/13		Clean Regulator with no Bypass
3	Nicholson Street	James River	R	3/6/13		Clean Regulator with no Bypass
4	Bloody Run	Gillies Creek	R	3/6/13		Regulator clean w/ no Bypass
5	Peach Street	James River	R	3/6/13		Clean Regulator with no Bypass
23	Old Fulton Street Bridge	Gillies Creek	R	3/6/13		GATE CLOSED, NO GROUND WATER
24	Gillie and Varina Streets	Gillies Creek	R	3/11/13		Clean Regulator, Normal Flow w/ no Bypass
25	Briel Street & Gillies Creek	Gillies Creek	R	3/11/13		Clean Regulator, Normal Flow w/ no Bypass
26	Gov't Road and NSRR	Gillies Creek	R	3/11/13		Clean Regulator, Normal Flow w/ no Bypass
27	New Williamsburg Road	Gillies Creek	R	3/11/13		GATE CLOSED, NO GROUND WATER
28	Williamsburg Road	Gillies Creek	R	3/11/13		NO OVER FLOW FROM CSO LINE
31	Oakwood Cemetery	Stoney Run	R	3/11/13		Clean Regulator with no Bypass
35	29th and Dock Street	Richmond Dock Canal	R	3/11/13		NO ROAD FOR CLEANING
39	Gov't Road & Gillies Creek	Gillies Creek	R	3/11/13	2/27/13	Cleaned Regulator, Normal Flow with no Bypass
Hilton Street CSO Area						
12	Hilton Street	Almond Creek	R	3/8/13		Regulator is Normal Flow with no Bypass
Miscellaneous Structures						
	Odor Room Canal Walk	Odor Control System		3/8/13		Blower and the tank normal
	14th & Semmes Ave		PS	3/8/13		Daily Inspection
	Cary & Maple Ave.	Main Connection to Henrico Co.		3/8/13		NO WATER in the line
	Maryland Ave.	Connection to Henrico Co.		3/8/13		NO H ₂ O in the line
	Seminary Ave.	Connection to Henrico Co.		3/8/13		NO H ₂ O in the line
	Pine Alley	Drain Boxes		3/8/13		NO WATER STANDING in Drain Box

Type Device: R = Regulator TG = Tide Gate W = Weir TF = Transfer Facility RO = River Outfall PS = Pump Station



City of Richmond

Department of Public Utilities - Wastewater Treatment Plant

CSO Controls Structures Monthly Inspection Summary

Year:

2013

Month:

March

Signature:

[Handwritten Signature]

CSO #	CSO Name	Receiving Water	Type Device	Inspection Date	PM Date	Services Performed
Hampton Street CSO Area						
33	Shields Lake	Dooley Branch	W	3/4/13		NO WATER OVER THE WEIRS
19	Hampton - Colorado		R	3/4/13		NORMAL REGULATOR WITH NO BYPASSES
19	Hampton - New York	James River	R	3/4/13		NORMAL FLOW WITH NO BYPASS
McCloy Street CSO Area						
20	McCloy Street		R & TF	3/4/13		REGULATOR IS NORMAL TO STATION
Northside James River Park CSO Area						
11	Park Hydro	James River	R & TF	3/8/13		FLOW IS NORMAL IN REGULATOR
10	Gambles Hill	Haxall Canal	R & TF	3/8/13		THERE IS NO WATER OVER WEIRS
9	7th Street	Haxall Canal	R & TF	3/8/13		THERE IS NORMAL FLOW
8	8th Street	Haxall Canal	R & TF	3/8/13		HAS NORMAL FLOW TO 7th STREET REGULATOR
7	Byrd Street	James River	R & TF	3/8/13		THERE IS NO OVER FLOW FROM CSO LINE
Southside James River Park CSO Area						
18	42nd Street	James River	R & TF	3/5/13		HAS NORMAL FLOW WITH NO BYPASSES
17	Reedy Creek	James River	R & TF	3/5/13		HAS NORMAL FLOW WITH NO BYPASSES
16	Woodland Heights	James River	R & TF	3/5/13		HAS NORMAL FLOW WITH NO BYPASSES
15	Canoe Run	James River	R & TF	3/5/13		NORMAL FLOW w/ NO BYPASSES
40	CSO-1 OUT/SSJRP	James River	RO	3/5/13		IS NORMAL - NO FLOW OVER FROM CSO LINE
Shockoe Creek CSO Area						
6	Shockoe Creek	James River	TG	3/5/13		BAR RACK IS CLEAN AND ALL GATES ARE CLOSED
34	19th and Dock Street	Richmond Dock Canal	R	3/5/13		NO OVER FLOW FROM CSO LINE
Wastewater Treatment Plant CSO Area						
14	Stockton Street	Manchester Canal	R	3/4/13		HAS NORMAL FLOW WITH NO BYPASSES
13	Maury Street	Manchester Canal	R	3/4/13		HAS NO FLOW TO THE REGULATOR
21	Garden Avenue	James River	R	3/4/13		HAS NORMAL FLOW TO PLANT WITH NO BYPASSES



City of Richmond

Department of Public Utilities - Wastewater Treatment Plant

CSO Controls Structures Monthly Inspection Summary

Year:

2013

Month:

April

Signature:

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CSO #	CSO Name	Receiving Water	Type Device	Inspection Date	PM Date	Services Performed
Hampton Street CSO Area						
33	Shields Lake	Dooley Branch	W	4/25/13		NO WATER OVER WEIRS
19	Hampton - Colorado		R	4/25/13		NORMAL REGULATOR WITH NO BYPASS
19	Hampton - New York	James River	R	4/25/13		NORMAL REGULATOR w/ NO BYPASS
McCloy Street CSO Area						
20	McCloy Street		R & TF	4/25/13		REGULATOR IS NORMAL → TO STATION
Northside James River Park CSO Area						
11	Park Hydro	James River	R & TF	4/15/13		NORMAL FLOW IN REGULATOR
10	Gambles Hill	Haxall Canal	R & TF	4/15/13		NO WATER OVER WEIRS
9	7th Street	Haxall Canal	R & TF	4/15/13		HAS NORMAL FLOW
8	8th Street	Haxall Canal	R & TF	4/15/13		NORMAL FLOW TO 7 th STREET REGULATOR
7	Byrd Street	James River	R & TF	4/15/13		NO OVER FLOW FROM CSO LINE
Southside James River Park CSO Area						
18	42nd Street	James River	R & TF	4/11/13		NORMAL FLOW WITH NO BYPASS
17	Reedy Creek	James River	R & TF	4/11/13		NORMAL FLOW WITH NO BYPASS
16	Woodland Heights	James River	R & TF	4/11/13		NORMAL FLOW WITH NO BYPASS
15	Canoe Run	James River	R & TF	4/11/13		NORMAL FLOW WITH NO BYPASS
40	CSO-1 OUT/SSJRP	James River	RO	4/11/13		NORMAL FLOW - NO OVER FLOW FROM CSO LINE
Shockoe Creek CSO Area						
6	Shockoe Creek	James River	TG	4/11/13		ALL GATES ARE CLOSED, BAR RACK IS CLEAN
34	19th and Dock Street	Richmond Dock Canal	R	4/11/13		NO OVER FLOW FROM CSO LINE
Wastewater Treatment Plant CSO Area						
14	Stockton Street	Manchester Canal	R	4/9/13		NORMAL FLOW WITH NO BYPASS
13	Maury Street	Manchester Canal	R	4/9/13		NO FLOW TO THE REGULATOR
21	Garden Avenue	James River	R	4/9/13		NORMAL FLOW TO PLANT WITH NO BYPASS

Type Device: R = Regulator TG = Tide Gate W = Weir TF = Transfer Facility RO = River Outfall PS = Pump Station



City of Richmond

Department of Public Utilities - Wastewater Treatment Plant

CSO Controls Structures Monthly Inspection Summary

Year: 2013

Month: April

Signature: *[Handwritten Signature]*

CSO #	CSO Name	Receiving Water	Type Device	Inspection Date	PM Date	Services Performed
Hampton Street CSO Area						
33	Shields Lake	Dooley Branch	W			NO WATER OVER WEIRS
19	Hampton - Colorado		R			NORMAL REGULATOR WITH NO BYPASS
19	Hampton - New York	James River	R			NORMAL REGULATOR WITH NO BYPASS
McCloy Street CSO Area						
20	McCloy Street		R & TF			REGULATOR IS NORMAL GOING TO STATION
Northside James River Park CSO Area						
11	Park Hydro	James River	R & TF			NORMAL FLOW IN REGULATOR
10	Gambles Hill	Haxall Canal	R & TF			NO WATER OVER WEIRS
9	7th Street	Haxall Canal	R & TF			HAS NORMAL FLOW
8	8th Street	Haxall Canal	R & TF			NORMAL FLOW TO 7th STREET REGULATOR
7	Byrd Street	James River	R & TF			NO OVER FLOW FROM CSO LINE
Southside James River Park CSO Area						
18	42nd Street	James River	R & TF			NORMAL FLOW w/ NO BYPASS
17	Reedy Creek	James River	R & TF			NORMAL FLOW w/ NO BYPASS
16	Woodland Heights	James River	R & TF			NORMAL FLOW w/ NO BYPASS
15	Canoe Run	James River	R & TF			NORMAL FLOW w/ NO BYPASS
40	CSO-1 OUT/SSJRP	James River	RO			NORMAL FLOW - NO OVER FLOW FROM CSO LINE
Shockoe Creek CSO Area						
6	Shockoe Creek	James River	TG			ALL GATES ARE CLOSED, BACKRACK IS CLEAN
34	19th and Dock Street	Richmond Dock Canal	R			NO OVER FLOW FROM CSO LINE
Wastewater Treatment Plant CSO Area						
14	Stockton Street	Manchester Canal	R			NORMAL FLOW WITH NO BYPASS
13	Maury Street	Manchester Canal	R			NO FLOW TO THE REGULATOR
21	Garden Avenue	James River	R			NORMAL FLOW TO PLANT w/ NO BYPASS

Type Device: R = Regulator TG = Tide Gate W = Weir TF = Transfer Facility RO = River Outfall PS = Pump Station



City of Richmond

Department of Public Utilities - Wastewater Treatment Plant

CSO Controls Structures Monthly Inspection Summary

Year:

2013

Month:

MAY

Signature:

[Handwritten Signature]

CSO #	CSO Name	Receiving Water	Type Device	Inspection Date	PM Date	Services Performed
Gillies Creek CSO Area						
2	Orleans Street	James River	R	5/15/13		HAVE BEEN PLUGGED
3	Nicholson Street	James River	R	5/15/13		HAVE BEEN PLUGGED / CLEANED OUT & WASHED DOWN
4	Bloody Run	Gillies Creek	R	5/15/13		REGULATOR CLEAN w/ NO BYPASS
5	Peach Street	James River	R	5/15/13		CLEAN REGULATOR w/ NO BYPASS
23	Old Fulton Street Bridge	Gillies Creek	R	5/2/13		GATES ARE CLOSED, NO GROUND WATER
24	Gillie and Varina Streets	Gillies Creek	R	5/2/13	5/2/13	NORMAL FLOW w/ NO BYPASS - CLEAN REGULATOR
25	Briel Street & Gillies Creek	Gillies Creek	R	5/2/13		REGULATOR HAS NORMAL FLOW w/ NO BYPASS
26	Govt Road and NSRR	Gillies Creek	R	5/2/13		NORMAL FLOW WITH NO BYPASS
27	New Williamsburg Road	Gillies Creek	R	5/2/13		GATES CLOSED, NO GROUND WATER.
28	Williamsburg Road	Gillies Creek	R	5/2/13		NO OVER FLOW FROM CSO LINE.
31	Oakwood Cemetery	Stoney Run	R	5/2/13		REGULATOR NORMAL WITH NO BYPASS
35	29th and Dock Street	Richmond Dock Canal	R	5/2/13		REGS (ROAD) CLEAN W/
39	Govt Road & Gillies Creek	Gillies Creek	R	5/2/13	5/2/13	NORMAL FLOW w/ NO BYPASS
Hilton Street CSO Area						
12	Hilton Street	Almond Creek	R	5/16/13	5/16/13	REGULATOR NORMAL w/ NO BYPASS. GATES GREASED
Miscellaneous Structures						
	Odor Room Canal Walk	Odor Control System		5/16/13		TANK & BLOWER ARE OPERABLE
	14th & Semmes Ave		PS	5/16/13		DAILY INSPECTED w/ STATION CHECKS
	Cary & Maple Ave.	Main Connection to Henrico Co.		5/16/13		THERE IS NO WATER IN THE LINE
	Maryland Ave.	Connection to Henrico Co.		5/16/13		NO WATER IN THE LINE.
	Seminary Ave.	Connection to Henrico Co.		5/16/13		THERE ISN'T ANY WATER IN THE LINE
	Pine Alley	Drain Boxes		5/16/13		NO WATER STANDING IN DRAIN BOX.

Type Device: R = Regulator TG = Tide Gate W = Weir TF = Transfer Facility RO = River Outfall PS = Pump Station



City of Richmond

Department of Public Utilities - Wastewater Treatment Plant

CSO Controls Structures Monthly Inspection Summary

Year: 2013

Month: MAY

Signature: *[Signature]*

CSO #	CSO Name	Receiving Water	Type Device	Inspection Date	PM Date	Services Performed
Hampton Street CSO Area						
33	Shields Lake	Dooley Branch	W	5/13/13		NO WATER OVER WEIR
19	Hampton - Colorado		R	5/14/13		NORMAL FLOW
19	Hampton - New York	James River	R	5/14/13	5/14/13	NORMAL FLOW, CSO WASHER CLEAN
McCloy Street CSO Area						
20	McCloy Street		R & TF			NORMAL FLOW
Northside James River Park CSO Area						
11	Park Hydro	James River	R & TF	5/15/13		Small Amount of water to Regulation
10	Cambles Hill	Haxall Canal	R & TF	5/17/13		NO WATER OVER WEIRS
9	7th Street	Haxall Canal	R & TF	5/17/13		NORMAL FLOW
8	8th Street	Haxall Canal	R & TF	5/17/13		NORMAL FLOW TO 2nd STREET REGULATION
7	Byrd Street	James River	R & TF	5/17/13		NO OVER FLOW FROM CSO LINE
Southside James River Park CSO Area						
18	42nd Street	James River	R & TF	5/23/13		NORMAL FLOW
17	Reedy Creek	James River	R & TF	5/23/13		NORMAL FLOW
16	Woodland Heights	James River	R & TF	5/23/13		NORMAL FLOW
15	Canoe Run	James River	R & TF	5/23/13		NORMAL FLOW
40	CSO-1 OUT/SSJRP	James River	RO	5/23/13		NORMAL FLOW
Shockoe Creek CSO Area						
6	Shockoe Creek	James River	TG	5/9/13		Gate is closed all gates closed
34	19th and Dock Street	Richmond Dock Canal	R	5/9/13		NO OVER FLOW FROM CSO LINE
Wastewater Treatment Plant CSO Area						
14	Stockton Street	Manchester Canal	R	5/9/13		NORMAL FLOW
13	Mauy Street	Manchester Canal	R	5/9/13		NO FLOW TO THE REGULATION, ITS CLOSED OFF
21	Garden Avenue	James River	R	5/9/13		NORMAL FLOW IN REGULATION / NO BYPASS

Type Device: R = Regulator TG = Tide Gate W = Weir TF = Transfer Facility RO = River Outfall PS = Pump Station



City of Richmond

Department of Public Utilities - Wastewater Treatment Plant

CSO Controls Structures Monthly Inspection Summary

Year: 2013

Month: JUNE

Signature: [Signature]

CSO #	CSO Name	Receiving Water	Type Device	Inspection Date	PM Date	Services Performed
Gillies Creek CSO Area						
2	Orleans Street	James River	R	6-3-13		NOT A REGULATOR ANY MORE
3	Nicholson Street	James River	R	6-3-13		NOT A REGULATOR ANY MORE
4	Bloody Run	Gillies Creek	R	6-3-13		NORMAL FLOW WITH NO BYPASSES
5	Peach Street	James River	R	6-3-13		NORMAL FLOW WITH NO BYPASSES
23	Old Fulton Street Bridge	Gillies Creek	R	6-3-13		GATE CLOSED & NO GROUND WATER
24	Gillie and Varina Streets	Gillies Creek	R	6-3-13		NORMAL FLOW
25	Briel Street & Gillies Creek	Gillies Creek	R	6-3-13		NORMAL FLOW
26	Govt Road and NSRR	Gillies Creek	R	6-4-13		NORMAL FLOW
27	New Williamsburg Road	Gillies Creek	R	6-4-13		NORMAL FLOW
28	Williamsburg Road	Gillies Creek	R	6-4-13		GATE CLOSED NO GROUND WATER
31	Oakwood Cemetery	Stoney Run	R	6-4-13		NO OVER FLOW FROM CSO LINE
35	29th and Dock Street	Richmond Dock Canal	R	6-4-13		NORMAL FLOW
39	Govt Road & Gillies Creek	Gillies Creek	R	6-4-13		NO BYPASS NEED A ROAD
						NORMAL FLOW
Hilton Street CSO Area						
12	Hilton Street	Almond Creek	R	6-4-13		NORMAL FLOW
Miscellaneous Structures						
	Odor Room Canal Walk	Odor Control System		6-5-13		TANK & BLOWER IS OK
	14th & Semmes Ave		PS	6-5-13		DAILY INSPECTION
	Cary & Maple Ave.	Main Connection to Henrico Co.		6-5-13		NO WATER IN CONNECTION LINE
	Maryland Ave.	Connection to Henrico Co.		6-5-13		NO WATER IN CONNECTION LINE
	Seminary Ave.	Connection to Henrico Co.		6-5-13		NO WATER IN CONNECTION LINE
	Pine Alley	Drain Boxes		6-5-13		NO WATER STANDING IN DRAIN BOX

Type Device: R = Regulator TG = Tide Gate W = Weir TF = Transfer Facility RO = River Outfall PS = Pump Station



City of Richmond

Department of Public Utilities - Wastewater Treatment Plant

CSO Controls Structures Monthly Inspection Summary

Year: 2013

Month: JUNE

Signature: *[Signature]*

CSO #	CSO Name	Receiving Water	Type Device	Inspection Date	PM Date	Services Performed
Hampton Street CSO Area						
33	Shields Lake	Dooley Branch	W	6-7-13		NO WATER OVER WEIR
19	Hampton - Colorado		R	6-7-13		NORMAL FLOW WITH NO BYPASS
19	Hampton - New York	James River	R	6-7-13		NORMAL FLOW WITH NO BYPASS
McCloy Street CSO Area						
20	McCloy Street		R & TF			
Northside James River Park CSO Area						
11	Park Hydro	James River	R & TF	6-5-13		SMALL AMOUNT OF WATER TO REGULATOR
10	Gambles Hill	Haxall Canal	R & TF	6-5-13		NO WATER OVER WEIR
9	7th Street	Haxall Canal	R & TF	6-5-13		NORMAL FLOW WITH NO BYPASS TO CANAL
8	6th Street	Haxall Canal	R & TF	6-5-13		NORMAL FLOW TO TEST REGULATOR
7	Byrd Street	James River	R & TF	6-5-13		NO OVER FLOW FROM CSO LINE
Southside James River Park CSO Area						
18	42nd Street	James River	R & TF	6-6-13		NORMAL FLOW WITH NO BYPASS
17	Reedy Creek	James River	R & TF	6-6-13		NORMAL FLOW WITH NO BYPASS
16	Woodland Heights	James River	R & TF	6-6-13		NORMAL FLOW WITH NO BYPASS
15	Canoe Run	James River	R & TF	6-6-13		NORMAL FLOW WITH NO BYPASS
40	CSO-1 OUT/SSJRP	James River	RO	6-6-13		RIVER IS HIGH NO TRASH IN RIVER
Shockoe Creek CSO Area						
6	Shockoe Creek	James River	TG	6-6-13		BAN RACK IS CLEANED ALL GATES ARE CLOSED
34	19th and Dock Street	Richmond Dock Canal	R	6-6-13		NO OVER FLOW FROM CSO LINE
Wastewater Treatment Plant CSO Area						
14	Stockton Street	Manchester Canal	R	6-7-13		NORMAL FLOW WITH NO BYPASS
13	Maury Street	Manchester Canal	R	6-7-13		NOT A REGULATOR ANY MORE
21	Garden Avenue	James River	R	6-7-13		NORMAL FLOW WITH NO BYPASS

Type Device: R = Regulator TG = Tide Gate W = Weir TF = Transfer Facility RO = River Outfall PS = Pump Station



City of Richmond

Department of Public Utilities - Wastewater Treatment Plant

CSO Controls Structures Monthly Inspection Summary

Year: 2013

Month: July

Signature: [Signature]

CSO #	CSO Name	Receiving Water	Type Device	Inspection Date	PM Date	Services Performed
Hampton Street CSO Area						
33	Shields Lake	Dooley Branch	W		7-10-13	NO WATER OVER WEIR
19	Hampton - Colorado		R		7-10-13	NORMAL flow with NO BYPASS
19	Hampton - New York	James River	R		7-10-13	NORMAL flow with NO BYPASS
McCloy Street CSO Area						
20	McCloy Street		R & TF		7-10-13	NORMAL flow to the TUNNEL
Northside James River Park CSO Area						
11	Park Hydro	James River	R & TF		7-11-13	SMALL AMOUNT OF WATER TO REGULATOR
10	Gambles Hill	Haxall Canal	R & TF		7-11-13	NO OVER FLOW
9	7th Street	Haxall Canal	R & TF		7-11-13	NORMAL flow
8	8th Street	Haxall Canal	R & TF		7-11-13	NORMAL flow TO TEST REGULATOR
7	Byrd Street	James River	R & TF		7-11-13	NO OVER FLOW FROM CSO LINE
Southside James River Park CSO Area						
18	42nd Street	James River	R & TF		7-11-13	NORMAL flow with NO BYPASS
17	Reedy Creek	James River	R & TF		7-11-13	NORMAL flow with NO BYPASS
16	Woodland Heights	James River	R & TF		7-11-13	NORMAL flow with NO BYPASS
15	Canoe Run	James River	R & TF		7-11-13	NORMAL flow with NO BYPASS
40	CSO-1 OUT/SSJRP	James River	RO		7-11-13	RIVER IS HIGH NO TRASH
Shockoe Creek CSO Area						
6	Shockoe Creek	James River	TG		7-12-13	BAR RACK CLEANED ALL GATES CLOSED
34	19th and Dock Street	Richmond Dock Canal	R		7-12-13	NO OVER FLOW FROM CSO LINE
Wastewater Treatment Plant CSO Area						
14	Stockton Street	Manchester Canal	R		7-12-13	NORMAL flow GATE CLOSED
13	Maury Street	Manchester Canal	R			NOT A REGULATOR ANY MORE
21	Garden Avenue	James River	R		7-12-13	NORMAL flow GATE CLOSED

Type Device: R = Regulator TG = Tide Gate W = Weir TF = Transfer Facility RO = River Outfall PS = Pump Station



City of Richmond

Department of Public Utilities - Wastewater Treatment Plant

CSO Controls Structures Monthly Inspection Summary

Year: 2013

Month: July

Signature: *[Signature]*

CSO #	CSO Name	Receiving Water	Type Device	Inspection Date	PM Date	Services Performed
Gillies Creek CSO Area						
2	Orleans Street	James River	R	7-8-13	7-8-13	about A REGULATOR. WORKING
3	Nicholson Street	James River	R	7-8-13	7-8-13	NOT A REGULATOR. WORKING
4	Bloody Run	Gillies Creek	R	7-8-13	7-8-13	NORMAL FLOW
5	Peach Street	James River	R	7-8-13	7-8-13	NORMAL FLOW
23	Old Fulton Street Bridge	Gillies Creek	R	7-8-13	7-8-13	GATE CLOSED NO GROUND WATER
24	Gillie and Varina Streets	Gillies Creek	R	7-8-13	7-8-13	NORMAL FLOW
25	Briel Street & Gillies Creek	Gillies Creek	R	7-8-13	7-8-13	NORMAL FLOW
26	Gov't Road and NSRR	Gillies Creek	R	7-8-13	7-8-13	NORMAL FLOW
27	New Williamsburg Road	Gillies Creek	R	7-9-13	7-9-13	GATE CLOSED
28	Williamsburg Road	Gillies Creek	R	7-9-13	7-9-13	NO OVER FLOW FROM CSO LINE
31	Oakwood Cemetery	Stoney Run	R	7-9-13	7-9-13	NORMAL FLOW
35	29th and Dock Street	Richmond Dock Canal	R	7-9-13	7-9-13	NEED TO BE CLEANED NO ROAD
39	Gov't Road & Gillies Creek	Gillies Creek	R	7-9-13	7-9-13	NORMAL FLOW
Hilton Street CSO Area						
12	Hilton Street	Almond Creek	R	7-9-13	7-9-13	NORMAL FLOW
Miscellaneous Structures						
	Odor Room Canal Walk	Odor Control System		7-10-13	7-10-13	TANK & BLOWER IS OK
	14th & Semmes Ave		PS	7-10-13	7-10-13	DAILY INSPECTIONS
	Cary & Maple Ave.	Main Connection to Henrico Co.		7-10-13	7-10-13	NO WATER IN LINE
	Maryland Ave.	Connection to Henrico Co.		7-10-13	7-10-13	NO WATER IN LINE
	Seminary Ave.	Connection to Henrico Co.		7-10-13	7-10-13	NO WATER IN LINE
	Pine Alley	Drain Boxes		7-10-13	7-10-13	NO WATER STANDING IN DRAIN BOX

Type Device: R = Regulator TG = Tide Gate W = Weir TF = Transfer Facility RO = River Outfall PS = Pump Station



City of Richmond

Department of Public Utilities - Wastewater Treatment Plant

CSO Controls Structures Monthly Inspection Summary

Year: 2013

Month: August

Signature: H. S. Season

CSO #	CSO Name	Receiving Water	Type Device	Inspection Date	PM Date	Services Performed
Hampton Street CSO Area						
33	Shields Lake	Dooley Branch	W		8-28-13	No water over the weir
19	Hampton - Colorado		R		8-28-13	normal flow with no bypass
19	Hampton - New York	James River	R		8-28-13	normal flow with no bypass
McCloy Street CSO Area						
20	McCloy Street		R & TF		8-28-13	Normal Flow to The Tunnel
Northside James River Park CSO Area						
11	Park Hydro	James River	R & TF		8-28-13	Small amount of water to Regulator
10	Gambles Hill	Haxall Canal	R & TF		8-28-13	No over flow
9	7th Street	Haxall Canal	R & TF		8-28-13	Normal Flow
8	8th Street	Haxall Canal	R & TF		8-28-13	Normal Flow
7	Byrd Street	James River	R & TF		8-28-13	Normal Flow
Southside James River Park CSO Area						
18	42nd Street	James River	R & TF		8-28-13	Normal Flow
17	Reedy Creek	James River	R & TF		8-28-13	Normal Flow
16	Woodland Heights	James River	R & TF		8-28-13	Normal Flow
15	Canoe Run	James River	R & TF		8-28-13	Normal Flow
40	CSO-1 OUT/SSJRP	James River	RO		8-28-13	Normal Flow
Shockoe Creek CSO Area						
6	Shockoe Creek	James River	TG		8-28-13	Bar Rack Has Been cleaned
34	19th and Dock Street	Richmond Dock Canal	R		8-28-13	
Wastewater Treatment Plant CSO Area						
14	Stockton Street	Manchester Canal	R		8-28-13	Normal Flow Gate Flow
13	Maury Street	Manchester Canal	R		8-28-13	MT A Regulator Any more.
21	Garden Avenue	James River	R		8-28-13	Normal Flow Gate closed

Type Device: R = Regulator TG = Tide Gate W = Weir TF = Transfer Facility RO = River Outfall PS = Pump Station



City of Richmond

Department of Public Utilities - Wastewater Treatment Plant

CSO Controls Structures Monthly Inspection Summary

Year: 2013

Month: AUGUST

Signature: W. S. Sherson

CSO #	CSO Name	Receiving Water	Type Device	Inspection Date	PM Date	Services Performed
Gillies Creek CSO Area						
2	Orleans Street	James River	R	8-26-13	8-26-13	NOT A Regulator
3	Nicholson Street	James River	R	8-26-13	8-26-13	NOT A Regulator
4	Bloody Run	Gillies Creek	R		8-26-13	Normal Flow
5	Peach Street	James River	R		8-26-13	Normal Flow
23	Old Fulton Street Bridge	Gillies Creek	R		8-26-13	Gate closed
24	Gillie and Varina Streets	Gillies Creek	R		8-26-13	Normal Flow
25	Briel Street & Gillies Creek	Gillies Creek	R		8-26-13	Normal Flow
26	Gov't Road and NSRR	Gillies Creek	R		8-26-13	Normal Flow
27	New Williamsburg Road	Gillies Creek	R		8-27-13	Gate closed
28	Williamsburg Road	Gillies Creek	R		8-27-13	NO over Flow
31	Oakwood Cemetery	Stoney Run	R		8-27-13	Normal Flow
35	29th and Dock Street	Richmond Dock Canal	R		8-27-13	Brush needs to be cleaned
39	Gov't Road & Gillies Creek	Gillies Creek	R		8-27-13	Normal Flow
Hilton Street CSO Area						
12	Hilton Street	Almond Creek	R		8-27-13	Normal Flow
Miscellaneous Structures						
	Odor Room Canal Walk	Odor Control System			8-30-13	Box and Blower OK
	14th & Semmes Ave		PS		8-30-13	DAILY Inspections
	Cary & Maple Ave.	Main Connection to Henrico Co.			8-30-13	no water in line
	Maryland Ave.	Connection to Henrico Co.			8-30-13	no water in line
	Seminary Ave.	Connection to Henrico Co.			8-30-13	no water in line
	Pine Alley	Drain Boxes			8-30-13	no water in line

Type Device: R = Regulator TG = Tide Gate W = Weir TF = Transfer Facility RO = River Outfall PS = Pump Station



City of Richmond

Department of Public Utilities - Wastewater Treatment Plant

CSO Controls Structures Monthly Inspection Summary

Year: 2013

Month: Sept

Signature: H. S. Shanon

CSO #	CSO Name	Receiving Water	Type Device	Inspection Date	PM Date	Services Performed
Gillies Creek CSO Area						
2	Orleans Street	James River	R		9-3-13	Not Regulator anymore
3	Nicholson Street	James River	R		9-3-13	Not Regulator anymore
4	Bloody Run	Gillies Creek	R		9-3-13	normal flow
5	Peach Street	James River	R		9-3-13	normal flow
23	Old Fulton Street Bridge	Gillies Creek	R		9-3-13	Gate closed no ground water.
24	Gillie and Varina Streets	Gillies Creek	R		9-3-13	normal flow
25	Briel Street & Gillies Creek	Gillies Creek	R		9-3-13	normal flow
26	Gov't Road and NSRR	Gillies Creek	R		9-3-13	Gate closed
27	New Williamsburg Road	Gillies Creek	R		9-4-13	No flow
28	Williamsburg Road	Gillies Creek	R		9-4-13	normal flow
31	Oakwood Cemetery	Stoney Run	R		9-4-13	needs to be cleaned still.
35	29th and Dock Street	Richmond Dock Canal	R		9-4-13	normal flow
39	Gov't Road & Gillies Creek	Gillies Creek	R		9-4-13	normal flow.
Hilton Street CSO Area						
12	Hilton Street	Almond Creek	R		9-4-13	normal flow
Miscellaneous Structures						
	Odor Room Canal Walk	Odor Control System			9-5-13	Tank & Blower OK.
	14th & Semmes Ave		PS		9-5-13	Daily inspections
	Cary & Maple Ave.	Main Connection to Henrico Co.			9-5-13	no water in line
	Maryland Ave.	Connection to Henrico Co.			9-5-13	no water in line
	Seminary Ave.	Connection to Henrico Co.			9-5-13	no water in line
	Pine Alley	Drain Boxes			9-5-13	no water in line.



City of Richmond

Department of Public Utilities - Wastewater Treatment Plant

CSO Controls Structures Monthly Inspection Summary

Year: 2013

Month: Sept

Signature: W. S. Pearson

CSO #	CSO Name	Receiving Water	Type Device	Inspection Date	PM Date	Services Performed
Hampton Street CSO Area						
33	Shields Lake	Dooley Branch	W		9-5-13	No water over weir
19	Hampton - Colorado		R		9-5-13	normal flow with no bypass
19	Hampton - New York	James River	R		9-5-13	normal flow, no bypass
McCloy Street CSO Area						
20	McCloy Street		R & TF		9-6-13	normal flow to tunnel
Northside James River Park CSO Area						
11	Park Hydro	James River	R & TF		9-6-13	small amount of water to Regulator
10	Gambles Hill	Haxall Canal	R & TF		9-6-13	no over flow
9	7th Street	Haxall Canal	R & TF		9-6-13	normal flow
8	8th Street	Haxall Canal	R & TF		9-6-13	normal flow
7	Byrd Street	James River	R & TF		9-6-13	no over flow
Southside James River Park CSO Area						
18	42nd Street	James River	R & TF		9-6-13	normal flow, no bypass
17	Reedy Creek	James River	R & TF		9-6-13	normal flow, no bypass
16	Woodland Heights	James River	R & TF		9-6-13	normal flow, no bypass
15	Canoe Run	James River	R & TF		9-6-13	normal flow, no bypass
40	CSO-1 OUT/SSJRP	James River	RO		9-6-13	flow into, little water
Shockoe Creek CSO Area						
6	Shockoe Creek	James River	TG		9-9-13	See Rack needs to be cleaned
34	19th and Dock Street	Richmond Dock Canal	R		9-9-13	no over flow
Wastewater Treatment Plant CSO Area						
14	Stockton Street	Manchester Canal	R		9-9-13	normal flow
13	Maury Street	Manchester Canal	R		9-9-13	not a Regulator
21	Garden Avenue	James River	R		9-9-13	normal flow

Type Device: R = Regulator TG = Tide Gate W = Weir TF = Transfer Facility RO = River Outfall PS = Pump Station



City of Richmond

Department of Public Utilities - Wastewater Treatment Plant

CSO Controls Structures Monthly Inspection Summary

Year: 2013

Month: Oct

Signature: W. S. Season

CSO #	CSO Name	Receiving Water	Type Device	Inspection Date	PM Date	Services Performed
Hampton Street CSO Area						
33	Shields Lake #	Dooley Branch	W		10-18-13	No water over the Weir
19	Hampton - Colorado		R		10-18-13	normal flow
19	Hampton - New York	James River	R		10-18-13	normal flow
McCloy Street CSO Area						
20	McCloy Street		R & TF		10-18-13	normal flow to tunnel
Northside James River Park CSO Area						
11	Park Hydro	James River	R & TF		10-17-13	Normal flow to #11 fans on.
10	Gambles Hill	Haxall Canal	R & TF		10-17-13	No over flow
9	7th Street	Haxall Canal	R & TF		10-17-13	200 over flow from CSO line
8	8th Street	Haxall Canal	R & TF		10-17-13	Normal flow to 7th St
7	Byrd Street	James River	R & TF		10-17-13	No over flow from CSO line
Southside James River Park CSO Area						
18	42nd Street	James River	R & TF		10-15-13	Normal flow, cleaned by H+L/AS
17	Reedy Creek	James River	R & TF		10-15-13	cleaned by H+L/AS, normal flow
16	Woodland Heights	James River	R & TF		10-15-13	cleaned by H+L/AS, normal flow
15	Canoe Run	James River	R & TF		10-15-13	normal flow
40	CSO-1 OUT/SSJRP	James River	RO		10-15-13	Normal flow
Shockoe Creek CSO Area						
6	Shockoe Creek	James River	TG		10-16-13	clean face rock, little flow
34	19th and Dock Street	Richmond Dock Canal	R		10-16-13	Good flow, no over flow from CSO
Wastewater Treatment Plant CSO Area						
14	Stockton Street	Manchester Canal	R		10-16-13	Gate closed, normal flow to others
13	Maury Street	Manchester Canal	R		10-16-13	Not a Regulator anymore
21	Garden Avenue	James River	R		10-16-13	Gate closed, normal flow to others

Type Device: R = Regulator TG = Tide Gate W = Weir TF = Transfer Facility RO = River Outfall PS = Pump Station

P 225658



City of Richmond

Department of Public Utilities - Wastewater Treatment Plant

CSO Controls Structures Monthly Inspection Summary

Year: 2013

Month: Oct

Signature: W. S. Pearson

CSO #	CSO Name	Receiving Water	Type Device	Inspection Date	PM Date	Services Performed
Hampton Street CSO Area						
33	Shields Lake	Dooley Branch	W		10-18-13	No water over the Weir
19	Hampton - Colorado		R		10-18-13	normal flow
19	Hampton - New York	James River	R		10-18-13	normal flow
McCloy Street CSO Area						
20	McCloy Street		R & TF		10-18-13	normal flow to tunnel
Northside James River Park CSO Area						
11	Park Hydro	James River	R & TF		10-17-13	Normal flow to the 11 fans on.
10	Gambles Hill	Haxall Canal	R & TF		10-17-13	No over flow
9	7th Street	Haxall Canal	R & TF		10-17-13	280 over flow from CSO line
8	8th Street	Haxall Canal	R & TF		10-17-13	Normal flow to 7th St
7	Byrd Street	James River	R & TF		10-17-13	No over flow from CSO line
Southside James River Park CSO Area						
18	42nd Street	James River	R & TF		10-15-13	Normal flow, cleaned by H&A's
17	Reedy Creek	James River	R & TF		10-15-13	cleaned by H&A's, normal flow
16	Woodland Heights	James River	R & TF		10-15-13	cleaned by H&A's, normal flow
15	Canoe Run	James River	R & TF		10-15-13	normal flow
40	CSO-1 OUT/SSJRP	James River	RO		10-15-13	Normal flow
Shockoe Creek CSO Area						
6	Shockoe Creek	James River	TG		10-16-13	clean face rock, little flow
34	19th and Dock Street	Richmond Dock Canal	R		10-16-13	Good flow; no over flow from CSO
Wastewater Treatment Plant CSO Area						
14	Stockton Street	Manchester Canal	R		10-16-13	Gate closed, normal flow to there
13	Maury Street	Manchester Canal	R		10-16-13	Not a Regulator anymore
21	Garden Avenue	James River	R		10-16-13	Gate closed, normal flow to it.

Type Device: R = Regulator TG = Tide Gate W = Weir TF = Transfer Facility RO = River Outfall PS = Pump Station

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City of Richmond

Department of Public Utilities - Wastewater Treatment Plant

CSO Controls Structures Monthly Inspection Summary

Year: *NOV 2013*

Month: *NOV*

Signature: *H. S. Season*

CSO #	CSO Name	Receiving Water	Type Device	Inspection Date	PM Date	Services Performed
Gillies Creek CSO Area						
2	Orleans Street	James River	R		<i>11-13-13</i>	<i>NOT A Regulator</i>
3	Nicholson Street	James River	R		<i>11-13-13</i>	<i>NOT A Regulator</i>
4	Bloody Run	Gillies Creek	R		<i>11-13-13</i>	<i>normal Flow</i>
5	Peach Street	James River	R		<i>11-13-13</i>	<i>normal Flow</i>
23	Old Fulton Street Bridge	Gillies Creek	R		<i>11-13-13</i>	<i>GATE CLOSED, Little water</i>
24	Gillie and Varina Streets	Gillies Creek	R		<i>11-13-13</i>	<i>normal Flow</i>
25	Briel Street & Gillies Creek	Gillies Creek	R		<i>11-13-13</i>	<i>normal Flow</i>
26	Gov't Road and NSRR	Gillies Creek	R		<i>11-13-13</i>	<i>normal Flow</i>
27	New Williamsburg Road	Gillies Creek	R		<i>11-14-13</i>	<i>GATE CLOSED</i>
28	Williamsburg Road	Gillies Creek	R		<i>11-14-13</i>	<i>NO OVER Flow</i>
31	Oakwood Cemetery	Stoney Run	R		<i>11-14-13</i>	<i>normal Flow</i>
35	29th and Dock Street	Richmond Dock Canal	R		<i>11-14-13</i>	<i>normal Flow</i>
39	Gov't Road & Gillies Creek	Gillies Creek	R		<i>11-14-13</i>	<i>normal Flow</i>
Hilton Street CSO Area						
12	Hilton Street	Almond Creek	R		<i>11-14-13</i>	<i>Normal Flow</i>
Miscellaneous Structures						
	Odor Room Canal Walk	Odor Control System			<i>11-15-13</i>	<i>cycled system, OK</i>
	14th & Semmes Ave		PS		<i>11-15-13</i>	<i>DRIFT INSPECTIONS</i>
	Cary & Maple Ave.	Main Connection to Henrico Co.			<i>11-15-13</i>	<i>NO WATER IN Line</i>
	Maryland Ave.	Connection to Henrico Co.			<i>11-15-13</i>	<i>NO WATER IN Line</i>
	Seminary Ave.	Connection to Henrico Co.			<i>11-15-13</i>	<i>NO WATER IN Line</i>
	Pine Alley	Drain Boxes			<i>11-15-13</i>	<i>NO WATER IN Alley or Box</i>

Type Device: R = Regulator TG = Tide Gate W = Weir TF = Transfer Facility RO = River Outfall PS = Pump Station



City of Richmond

Department of Public Utilities - Wastewater Treatment Plant

CSO Controls Structures Monthly Inspection Summary

Year: 2013

Month: NOV

Signature: W. S. Pearson

CSO #	CSO Name	Receiving Water	Type Device	Inspection Date	PM Date	Services Performed
Hampton Street CSO Area						
33	Shields Lake	Dooley Branch	W		11-8-13	normal Flow, no Trash, no water over weir
19	Hampton - Colorado		R		11-8-13	normal Flow, no Trash, no Bypass
19	Hampton - New York	James River	R		11-8-13	Normal Flow, no Bypass
Mccloy Street CSO Area						
20	McCloy Street		R & TF			
Northside James River Park CSO Area						
11	Park Hydro	James River	R & TF		11-11-13	normal Flow to Regulator
10	Gambles Hill	Haxall Canal	R & TF		11-11-13	no water over weir
9	7th Street	Haxall Canal	R & TF		11-11-13	Normal Flow
8	8th Street	Haxall Canal	R & TF		11-11-13	Normal Flow
7	Byrd Street	James River	R & TF		11-11-13	normal Flow
Southside James River Park CSO Area						
18	42nd Street	James River	R & TF		11-11-13	normal Flow, no Bypass
17	Reedy Creek	James River	R & TF		11-11-13	normal Flow, no Bypass
16	Woodland Heights	James River	R & TF		11-11-13	Normal Flow, no Bypass
15	Canoe Run	James River	R & TF		11-11-13	Normal Flow, no Bypass
40	CSO-1 OUT/SSJRP	James River	RO		11-11-13	normal Flow no Trash or Leaves
Shockoe Creek CSO Area						
6	Shockoe Creek	James River	TG		11-12-13	Normal Flow, GAK closed, GAK Clean
34	19th and Dock Street	Richmond Dock Canal	R		11-12-13	no over Flow
Wastewater Treatment Plant CSO Area						
14	Stockton Street	Manchester Canal	R		11-12-13	GAKS closed, normal Flow
13	Maury Street	Manchester Canal	R		11-12-13	NOT A Regulator
21	Garden Avenue	James River	R		11-12-13	GAK closed normal Flow

Type Device: R = Regulator TG = Tide Gate W = Weir TF = Transfer Facility RO = River Outfall PS = Pump Station



City of Richmond

Department of Public Utilities - Wastewater Treatment Plant

CSO Controls Structures Monthly Inspection Summary

Year: 2013

Month: Dec

Signature: [Signature]

CSO #	CSO Name	Receiving Water	Type Device	Inspection Date	PM Date	Services Performed
Gillies Creek CSO Area						
2	Orleans Street	James River	R		12-16	NOT A Regulator
3	Nicholson Street	James River	R		12-16	NOT A Regulator
4	Bloody Run	Gillies Creek	R		12-16	normal flow, gates closed
5	Peach Street	James River	R		12-16	normal flow
23	Old Fulton Street Bridge	Gillies Creek	R		12-16	gate closed normal flow
24	Gillie and Varina Streets	Gillies Creek	R		12-16	normal flow
25	Briel Street & Gillies Creek	Gillies Creek	R		12-16	normal flow
26	Gov't Road and NSRR	Gillies Creek	R		12-16	normal flow
27	New Williamsburg Road	Gillies Creek	R		12-16	normal flow
28	Williamsburg Road	Gillies Creek	R		12-17	gate closed
31	Oakwood Cemetery	Stoney Run	R		12-17	no over flow
35	29th and Dock Street	Richmond Dock Canal	R		12-17	normal flow
39	Gov't Road & Gillies Creek	Gillies Creek	R		12-17	normal flow
Hilton Street CSO Area						
12	Hilton Street	Almond Creek	R		12-17	normal flow
Miscellaneous Structures						
	Odor Room Canal Walk	Odor Control System			12-18	Box OK Blowers on
	14th & Semmes Ave		PS		12-18	Daily inspections
	Cary & Maple Ave.	Main Connection to Henrico Co.			12-18	no water in line
	Maryland Ave.	Connection to Henrico Co.			12-18	no water in line
	Seminary Ave.	Connection to Henrico Co.			12-18	no water in line
	Pine Alley	Drain Boxes			12-18	no water in line & 13af

Type Device: R = Regulator TG = Tide Gate W = Weir TF = Transfer Facility RO = River Outfall PS = Pump Station



City of Richmond

Department of Public Utilities - Wastewater Treatment Plant

CSO Controls Structures Monthly Inspection Summary

Year: 2013

Month: Dec

Signature:

W. S. Sherson

CSO #	CSO Name	Receiving Water	Type Device	Inspection Date	PM Date	Services Performed
Hampton Street CSO Area						
33	Shields Lake	Dooley Branch	W		12-19	NO WATER over weir
19	Hampton - Colorado		R		12-19	normal Flow, no bypass
19	Hampton - New York	James River	R		12-19	normal Flow, no bypass
McCloy Street CSO Area						
20	McCloy Street		R & TF		12-19	normal Flow to tunnel,
Northside James River Park CSO Area						
11	Park Hydro	James River	R & TF		12-19	Small amount of water to Regulator
10	Gambles Hill	Haxall Canal	R & TF		12-19	NO over Flow
9	7th Street	Haxall Canal	R & TF		12-19	normal Flow
8	8th Street	Haxall Canal	R & TF		12-19	normal Flow
7	Byrd Street	James River	R & TF		12-19	normal Flow
Southside James River Park CSO Area						
18	42nd Street	James River	R & TF		12-19	normal Flow
17	Reedy Creek	James River	R & TF		12-19	normal Flow
16	Woodland Heights	James River	R & TF		12-19	normal Flow
15	Canoe Run	James River	R & TF		12-19	normal Flow
40	CSO-1 OUT/SSJRP	James River	RO		12-19	normal Flow
Shockoe Creek CSO Area						
6	Shockoe Creek	James River	TG		12-19	BAR Rack has been cleaned & creek
34	19th and Dock Street	Richmond Dock Canal	R		12-19	NO Trash normal Flow
Wastewater Treatment Plant CSO Area						
14	Stockton Street	Manchester Canal	R		12-19	normal Flow
13	Maury Street	Manchester Canal	R		12-19	NOT AT Regulator
21	Garden Avenue	James River	R		12-19	normal Flow, GATE closed

Type Device: R = Regulator TG = Tide Gate W = Weir TF = Transfer Facility RO = River Outfall PS = Pump Station

Combined Sewer System Report for 2013

APPENDIX 4-2

Pump Stations



City of Richmond
Department of Public Utilities - Wastewater Treatment Plant
NINE MINIMUM CONTROL'S REPORT

DOUGLASDALE PUMP STATION
MONTHLY PUMP READINGS

WORK ORDER #

P223597

YEAR >

2013

CIRCLE THE MONTH: JAN FEB MAR APR MAY JUNE JULY AUG SEPT OCT NOV DEC

Asset PM Group Name:	WWTP STATIONS
PM ID Number:	854
Asset Numbers:	0001602, 0005152, 0005178, 0005455
Asset Description:	WWTP PUMP STATIONS - HAMPTON, DOUGLASDALE, UPHAMBROOK, MCCLOY
Asset Location:	4 Different Locations Based on Location of Pump Station
PM Frequency:	Monthly

DATE	PUMP #1 0005210	PUMP #2 0005213	PUMP #3 0005214	Readings	Flow	NAME
1-1-13	3420.90	5803.9	400.4	24141	740,000	MB SM
1-2-13	3420.90	5803.9	406.4	24239	980,000	SB, LM, MS
1/3/13	3420.96	5803.9	410.6	24314	750,000	LM, MS
1-4-13	3421.00	5803.9	414.8	24381	1,70,000	SB, LM, MS
1-5-13	3421.00	5803.9	418.0	24433	520,000	FOX, AR, SS
1-6-13	3421.00	5803.9	421.3	24486	530,000	FOX, AR, SS
1-7-13	3421.00	5803.9	424.8	24544	580,000	SB, LM, MS
1/8/13	3421.00	5803.9	427.9	24594	500,000	MS, LM, SB
1-9-13	3421.01	5803.9	430.9	24641	470,000	LM
1-10-13	3421.01	5803.9	433.9	24691	500,000	SB, LM, MS
1-11-13	3421.01	5803.9	437.0	24741	500,000	SB, LM, MS
1-12-13	3421.01	5803.9	439.8	24787	460,000	SB, DA, RP
1-13-13	3421.01	5803.9	442.8	24835	480,000	SB, DA, RP
1-14-13	3421.01	5803.9	445.9	24885	500,000	SB, LM, AS
1-15-13	3421.01	5804.7	458.9	25120	235,000	SB, MS
1-16-13	3421.01	5804.9	473.0	25375	255,000	SB, LM, MS
1-17-13	3421.01	5805.0	484.5	25582	107,000	SB, LM, MS
1-18-13	3421.28	5821.4	507.3	26218	636,000	SB, LM, MS
1/19/13	3422.23	5830.3	524.7	26716	4,980,000	MS, PA, RP
1/20/13	3422.23	5830.3	531.9	26836	1,200,000	MS, PA, RP
1/21/13	3422.23	5830.3	538.1	26936	1,000,000	RP, MS, PA
1-22-13	3422.23	5830.3	544.2	27035	990,000	SB, LM, MS
1-23-13	3422.23	5830.3	549.4	27118	830,000	SB, LM, MS
1-24-13	3422.23	5830.3	555.4	27214	960,000	LM, MS
1-25-13	3422.23	5830.3	560.3	27292	180,000	SB, LM, MS
1-26-13	3422.23	5830.3	565.5	27373	810,000	MS, MS, SM
1-27-13	3422.23	5830.3	570.1	27447	740,000	MS, MS, SM
1-28-13	3422.23	5830.3	575.5	27533	860,000	SB, LM, MS
1-29-13	3422.23	5830.3	580.7	27616	830,000	SB, LM, MS
1-30-13	3422.46	5834.3	581.1	27688	720,000	SB, LM, MS
1-31-13	3422.46	5841.5	581.5	27808	1,020,000	SB, LM, MS

Signature:

Date: Feb 5 13



City of Richmond
Department of Public Utilities - Wastewater Treatment Plant
NINE MINIMUM CONTROL'S REPORT

DOUGLASDALE PUMP STATION
MONTHLY PUMP READINGS

WORK ORDER #

Pd 23738

YEAR >

2013

CIRCLE THE MONTH: JAN FEB MAR APR MAY JUNE JULY AUG SEPT OCT NOV DEC

Asset PM Group Name: WWTP STATIONS

PM ID Number: 854

Asset Numbers: 0001602, 0005152, 0005178, 0005455

Asset Description: WWTP PUMP STATIONS - HAMPTON, DOUGLASDALE, UPHAMBROOK, MCCLOY

Asset Location: 4 Different Locations Based on Location of Pump Station

PM Frequency: Monthly

DATE	PUMP #1 0005210	PUMP #2 0005213	PUMP #3 0005214	Readings	Flow	NAME
2-1-13	3422.46	5841.5	595.1	28064	2500,000	SB, LM, MS
2-2-13	3422.46	5841.5	599.9	28142	780,000	CB, UR, SS
2-3-13	3422.46	5841.5	605.4	28230	880,000	CB, UR, SS
2-4-13	3422.46	5841.5	610.7	28315	850,600	SB, LM, MS
2-5-13	3422.63	5841.5	615.2	28389	740000	LM, MS
2-6-13	3422.63	5841.5	619.6	28459	700,600	SB, LM, MS
2-7-13	3422.63	5841.5	624.0	28528	690,000	SB, LM, MS
2-8-13	3422.63	5845.2	636.5	28807	2790000	SB, LM, MS
2-9-13	3422.63	5845.2	643.7	28900	1,230,000	CB, SB, AR
2-10-13	3422.63	5845.2	649.1	29010	860,600	CB, SB, AR
2-11-13	3422.63	5845.2	654.6	29104	880,000	SB, LM, MS
2-12-13	3422.63	5845.2	659.9	29188	840,000	LM, MS
2-13-13	3422.63	5845.2	664.7	29262	840,000	SB, LM
2-14-13	3422.63	5845.2	669.9	29345	830,000	SB, LM
2-15-13	3422.63	5845.2	674.8	29422	776,600	SB, MS
2-16-13	3422.63	5845.2	679.8	29500	780,000	SB, SS, DA
2-17-13	3422.63	5845.2	685.8	29594	940,000	SB, SS, DA
2-18-13	3422.63	5845.2	690.9	29674	800,000	SB, SS, DA
2-19-13	3422.63	O/S	696.6	29763	890,000	SB, LM, MS
2-20-13	3422.70	O/S	702.3	29855	900,000	SB, LM, MS
2-21-13	3422.70	O/S	707.4	29934	790,000	SB, LM
2-22-13	3422.70	O/S	712.7	30018	840,000	SB, LM
2-23-13	3422.70	O/S	718.3	3007	890,000	CB, RP, PA
2-24-13	3422.70	O/S	723.7	30191	890,000	CB, RP, PA
2-25-13	3422.70	O/S	729.6	30274	836,000	SB, LM, MS
2-26-13	3422.70	O/S	734.4	30358	840,000	SB, LM, MS
2-27-13	3422.74	O/S	744.0	30526	1680,000	SB, LM, MS
2-28-13	3422.90	O/S	747.8	30588	1620,000	SB, LM

Signature: [Signature]

Date: 2-28-13



City of Richmond
Department of Public Utilities - Wastewater Treatment Plant
NINE MINIMUM CONTROL'S REPORT

DOUGLASDALE PUMP STATION
MONTHLY PUMP READINGS

WORK ORDER #

PA24105

YEAR >

2013

CIRCLE THE MONTH: JAN FEB MAR APR MAY JUNE JULY AUG SEPT OCT NOV DEC

Asset PM Group Name: WWTP STATIONS

PM ID Number: 854

Asset Numbers: 0001602, 0005152, 0005178, 0005455

Asset Description: WWTP PUMP STATIONS - HAMPTON, DOUGLASDALE, UPHAMBROOK, MCCLOY

Asset Location: 4 Different Locations Based on Location of Pump Station

PM Frequency: Monthly

DATE	PUMP #1 0005210	PUMP #2 0005213	PUMP #3 0005214	Readings	Flow	NAME
3-1-13	3422.90	O/S	751.9	30652	640,000	SB, LM, MS
3-2-13	3422.90	O/S	755.3	30706	540,000	SB, SM, RP
3-3-13	3422.90	O/S	759.2	30766	600,000	SB, SM, RP
3-4-13	3422.90	O/S	762.7	30821	550,000	SB, LM, MS
3-5-13	3422.90	O/S	780.8	31151	3300000	SB, LM, MS
3-6-13	3423.64	O/S	792.2	31370	2190000	SB, LM, MS
3-7-13	3425.38	O/S	808.5	31683	3130000	SB, LM, MS
3-8-13	3425.43	O/S	816.2	31807	1240000	SB
3-9-13	3425.43	O/S	821.9	31897	900,000	MS
3-10-13	3425.54	O/S	827.0	31897	810,000	MS
3-11-13	3425.54	O/S	832.3	32061	830,000	SB, LM, MS
3-12-13	3425.54	O/S	838.0	32154	930,000	SB, LM, MS
3-13-13	3425.54	O/S	844.7	32261	1070000	SB, LM
3-14-13	3427.71	5847.4	853.3	32407	1,460,000	SB, LM, MS
3-15-13	3429.01	5851.1	873.5	32871	4100000	SB, LM, MS
3-16-13	3431.20	O/S	895.8	33296	4,190,000	MS, MS, AD
3-17-13	3432.27	O/S	908.5	33416	1260000	MS, MS, AR
3-18-13	3432.27	O/S	923.9	33576	1060000	SB, LM, MS
3-19-13	3432.54	O/S	939.7	33712	1,460,000	SB, LM, MS
3-20-13	3432.67	O/S	949.4	33795	830,000	SB, LM, MS
3-21-13	3432.67	O/S	958.0	33863	680000	LM, MS
3-22-13	3432.67	O/S	966.7	33932	690,000	SB
3-23-13	3432.67	O/S	975.0	33997	650,000	SB, LM, RP
3-24-13	3448.30	O/S	996.2	34437	4,400,000	CB, PA, RP
3-25-13	3448.30	O/S	1009.0	34608	1,500,000	SB, LM, MS
3-26-13	3448.30	O/S	1019.6	34745	1,370,000	SB
3-27-13	3448.30	O/S	1028.7	34861	1160000	LM, MS
3-28-13	3448.30	O/S	1037.0	34966	1,050,000	SB, LM, MS
3-29-13	3448.30	O/S	1045.0	35067	1,010,000	SB, CB, PA, RP
3-30-13	3448.33	O/S	1052.6	35163	960,000	SB, KA, CL
3-31-13	3448.37	O/S	1060.7	35265	1,020,000	SB, KA, CL

Signature:

B. Beasley

Date:

4/2/13



City of Richmond
Department of Public Utilities - Wastewater Treatment Plant
NINE MINIMUM CONTROL'S REPORT

DOUGLASDALE PUMP STATION
MONTHLY PUMP READINGS

WORK ORDER #

YEAR >

2013

CIRCLE THE MONTH: JAN FEB MAR APR MAY JUNE JULY AUG SEPT OCT NOV DEC

Asset PM Group Name:	WWTP STATIONS
PM ID Number:	854
Asset Numbers:	0001602, 0005162, 0005178, 0005455
Asset Description:	WWTP PUMP STATIONS - HAMPTON, DOUGLASDALE, UPHAMSBROOK, MCCLOY
Asset Location:	4 Different Locations Based on Location of Pump Station
PM Frequency:	Monthly

DATE	PUMP #1 0005210	PUMP #2 0005213	PUMP #3 0005214	Readings	Flow	NAME
4-1	3449.94	O/S	1072.0	35443	1,780,000	SB, LM, MS
4-2	3449.94	O/S	1079.4	35573	1,300,000	SB
4/3/13	3449.99	O/S	1086.8	35630	570,000	MS, LM
4-4-13	3449.99	O/S	1093.4	35713	830,000	LM, MS
4-5-13	3451.86	O/S	1105.3	35897	1,840,000	SB, LM
4-6-13	3451.86	O/S	1110.3	35959	620,000	FOX, STAFF, PERGAS
4-7-13	3451.86	O/S	1115.4	36023	640,000	FOX, STAFF, PERGAS
4-8-13	3451.86	O/S	1120.9	36092	790,000	SB, LM, MS
4-9-13	3451.86	O/S	1137.5	36401	3,090,000	MS, LM
4-10-13	3452.31	O/S	1143.9	36488	870,000	SB, LM, MS
4-11-13	3452.31	O/S	1151.2	36581	930,000	SB
4-12	3453.23	O/S	1159.6	36701	1,200,000	SB, LM, MS
4-13	3453.23	O/S	1165.7	36784	830,000	SB, CB, WR
4-14	3453.23	O/S	1170.9	36849	650,000	SB, CB, WR
4-15	3453.23	O/S	1176.3	36918	690,000	SB
4-16	3453.23	O/S	1181.0	36977	590,000	SB, LM
4-17	3453.23	O/S	1190.3	37132	1,550,000	SB, LM, MS
4-18-13	3454.43	O/S	1208.5	37484	352,000	LM, SB, MS
4-19-13	3454.43	O/S	1216.1	37580	960,000	SB, LM, MS
4-20-13	3455.46	O/S	1223.8	37696	1,160,000	SB, CB, AR
4-21	3455.46	O/S	1229.0	37761	650,000	SB, CB, AR
4-22	3455.96	O/S	1236.8	37877	1,160,000	SB
4-23	3455.96	O/S	1251.3	38198	2,710,000	SB
4-24	3455.96	O/S	1260.3	38262	1,140,000	SB
4-25-13	3455.96	O/S	1266.9	38344	820,000	LM, MS, SB
4-26	3455.96	O/S	1275.5	38452	1,080,000	SB
4/27/13	3455.96	O/S	1281.4	38525	730,000	MS, RP, DA
4/28/13	3455.96	O/S	1288.9	38620	950,000	MS, RP, DA
4-29	3456.68	O/S	1299.6	38777	1,570,000	SB, LM, MS
4-30	3457.72	O/S	1306.6	38881	1,040,000	SB, LM, MS

Signature: B. B. E.

Date: 5-1-13



City of Richmond
Department of Public Utilities - Wastewater Treatment Plant
NINE MINIMUM CONTROL'S REPORT

DOUGLASDALE PUMP STATION
MONTHLY PUMP READINGS

WORK ORDER #

1224365

YEAR >

2013

CIRCLE THE MONTH: JAN FEB MAR APR MAY JUNE JULY AUG SEPT OCT NOV DEC

Asset PM Group Name:

WWTP STATIONS

PM ID Number:

854

Asset Number:

0001602, 0005152, 0005178, 0005455

Asset Description:

WWTP PUMP STATIONS - HAMPTON, DOUGLASDALE, UPHAMBROOK, MCCLOY

Asset Location:

4 Different Locations Based on Location of Pump Station

PM Frequency:

Monthly

DATE	PUMP #1 0005210	PUMP #2 0005213	PUMP #3 0005214	Readings	Flow	NAME
5-1-13	3457.72	0/S	1312.6	38963	820,000	SB, LM, MS
5-2	3458.46	0/S	1326.7	39201	2,380,000	SB, LM, MS
5-3	3458.46	0/S	1334.3	39297	966,000	SB, LM, MS
5-4	3458.46	0/S	1334.3	39376	790,000	CB, CL, SM
5-5	3458.46	0/S	1340.7	39445	890,000	CB, CL, SM
5-6	3458.58	0/S	1354.6	39551	860,000	SB, LM, MS
5/7/13	3460.67	0/S	1366.7	39753	2,020,000	LM, MS
5-8-13	3461.85	0/S	1380.4	39981	2,280,000	LM, BR
5-9-13	3462.49	0/S	1387.6	40082	1,010,000	LM, MS
5-10-13	3462.58	0/S	1392.9	40149	670,000	LM, MS
5-11-13	3462.58	0/S	1397.8	40207	580,000	MS, RP, DA
5-12-13	34634.2	0/S	1409.5	40333	126,000	MS, RP, DA
5-13-13	3481.53	0/S	1430.3	40789	4,560,000	SB, MS, LM
5-14-13	3481.53	0/S	1436.5	40865	76,000	LM, MS
5-15	3481.53	0/S	1443.4	40951	860,000	SB
5-16	3481.53	0/S	1450.7	41032	810,000	SB, LM, MS
5-17	3482.76	0/S	1463.2	41231	1,890,000	SB, LM
5-18	3488.05	0/S	1473.2	41425	2,040,000	SA, CL
5-19	3489.67	0/S	1484.5	41604	1,790,000	SB, CL
5-20	3489.68	0/S	1491.1	41685	810,000	SB, LM
5-21	3489.68	0/S	1498.5	41778	930,000	SB, LM
5-22	3489.68	0/S	1505.8	41867	890,000	SB, LM
5-23	3489.68	0/S	1513.3	41960	930,000	SB, LM
5-24-13	3489.68	0/S	1519.2	42040	800,000	LM, SB
5-25	3489.68	0/S	1524.6	42106	660,000	Fox, CB, AR
5-26	3489.68	0/S	1529.1	42161	550,000	Fox, CB, AR
5-27	3489.68	0/S	1533.5	42214	530,000	Fox, CB, AR
5-28	3489.68	0/S	1539.1	42286	720,000	SB, LM, MS
5-29	3491.60	0/S	1554.1	42575	2,890,000	SB, LM, MS
5-30	3491.60	0/S	1561.5	42667	930,000	SB, LM, MS
5-31	3491.60	0/S	1568.1	42749	820,000	SB, LM, MS

By: *[Signature]*

Date: 6-4-13



City of Richmond
Department of Public Utilities - Wastewater Treatment Plant
NINE MINIMUM CONTROL'S REPORT

DOUGLASDALE PUMP STATION
MONTHLY PUMP READINGS

WORK ORDER #

P224637

YEAR >

2013

CIRCLE THE MONTH: JAN FEB MAR APR MAY JUNE JULY AUG SEPT OCT NOV DEC

Asset PM Group Name: WWTP STATIONS

PM ID Number: 854

Asset Numbers: 0001602, 0005152, 0005178, 0005455

Asset Description: WWTP PUMP STATIONS - HAMPTON, DOUGLASDALE, UPHAMBROOK, MCCLOY

Asset Location: 4 Different Locations Based on Location of Pump Station

PM Frequency: Monthly

	PUMP #1	PUMP #2	PUMP #3			
DATE	0005210	0005213	0005214	Readings	Flow	NAME
6-1	3491.60	0/S	1575.1	42835	860,000	FOX, PA, RP
2	3491.60	0/S	1582.2	42922	870,000	FOX, PA, RP
3	3492.03	0/S	1590.5	43036	1,140,000	SB, LM, MS
4	3492.03	0/S	1603.6	43255	2,199,000	SB, LM, MS
5	3492.03	0/S	1611.3	43344	890,000	SB, LM, MS
6	3492.09	0/S	1618.0	43432	780,000	SB, LM, MS
7	3492.09	0/S	1624.8	43519	870,000	SB, LM, MS
8	3499.22	0/S	1640.3	43805	2,860,000	SB, KA, CL
9	3517.09	0/S	1663.7	44339	5,240,000	SB, KA, CL
10	3523.93	0/S	1687.0	44820	4,810,000	SB, LM, MS
11	3525.02	0/S	1696.1	44950	1,300,000	SB, LM
12	3525.08	0/S	1702.0	45019	690,000	SB, LM, MS
13	3525.68	5852.2	1707.9	45087	680,000	SB, LM, MS
14	3526.17	5852.2	1713.9	45167	800,000	SB, LM, MS
6/15/13	3526.17	5852.2	1718.8	45228	610,000	MS, SM, RP
6/16/13	3526.17	5852.2	1724.2	45293	650,000	MS, RP, SM
6-17	3529.80	5852.2	1744.2	45708	4,690,000	SB, LM, MS
6-18	3532.51	5852.2	1757.5	45959	2,510,000	SB, LM, MS
6-19	3536.67	0/S	1770.3	46182	2,230,000	SB, LM, MS
6-20	3536.67	0/S	1776.2	46281	690,000	SB, LM, MS
6-21	3536.67	0/S	1790.9	46428	1,770,000	SB, LM, MS
6-22-13	3536.90	0/S	1813.0	46715	2,870,000	MS, CL, WP
6-23-13	3538.25	0/S	1835.9	47058	3,430,000	MS, CL, WP
6-24-13	3538.25	0/S	1842.8	47142	840,000	LM
6-25	3538.56	5863.8	1843.5	47368	2,260,000	SB, LM, MS
6-26	3538.56	5870.7	1843.5	47467	990,000	SB, LM, MS
6-27	3538.56	5878.4	1843.5	47578	1,110,000	SB, LM, MS
6-28	3538.56	5884.6	1843.5	47666	880,000	SB, LM, MS
6-29	3538.56	5890.8	1843.5	47952	860,000	CB, SB, AR
6-30	3538.57	5894.8	1843.5	47810	580,000	CS, SD, AN

Signature:

B. Beeley

Date:

6 30 13



City of Richmond
Department of Public Utilities - Wastewater Treatment Plant
NINE MINIMUM CONTROL'S REPORT

DOUGLASDALE PUMP STATION
MONTHLY PUMP READINGS

WORK ORDER #

P224813

YEAR >

2013

CIRCLE THE MONTH: JAN FEB MAR APR MAY JUNE JULY AUG SEPT OCT NOV DEC

Asset PM Group Name: WWTP STATIONS

PM ID Number: 854

Asset Numbers: 0001602, 0005152, 0005178, 0005455

Asset Description: WWTP PUMP STATIONS - HAMPTON, DOUGLASDALE, UPHAMBROOK, MCCLOY

Asset Location: 4 Different Locations Based on Location of Pump Station

PM Frequency: Monthly

DATE	PUMP #1 0005210	PUMP #2 0005213	PUMP #3 0005214	Readings	Flow	NAME
7-1-13	3538.60	5901.5	015	47912	1,020,000	SB, LM, SS
7-2	3538.64	5910.8	015	48072	1,660,000	SB, LM, SS
7-3	3538.64	5917.3	015	48163	210,000	SB, LM, SS
7-4	3538.64	5925.5	015	48293	1200,000	SB, CB
7-5	3538.64	5931.1	015	48370	770,000	SB, LM, SS
7-6	3538.64	5936.5	015	48443	736,000	SB, KA, RP
7-7	3538.80	5955.2	015	48794	3510,000	SB, KA, RP
7-8	3538.81	5980.4	015	49277	4830,000	SB, LM, SS
7-9	3538.81	5990.8	015	49453	1,760,000	SB, LM, SS
7-10	3538.81	5998.0	015	49556	1,030,000	SB, LM, SS
7-11	3539.12	6008.0	015	49721	1,050,000	SB, LM, SS
7-12	3539.24	6015.6	015	49844	1,230,000	SB, LM, SS
7-13	3539.24	6020.6	015	49912	680,000	FOX, DA, CL
14	3539.24	6026.2	015	49991	790,000	FOX, DA, CL
15	3539.24	6031.0	015	50057	660,000	SB, LM, SS
16	3539.24	6057.8	015	50626	5,690,000	SB, SS
17	3539.24	6062.8	015	50698	720,000	SB, LM, SS
18	3539.24	6063.2	1849.4	50789	910,000	SB, LM, SS
19	015	6063.2	1856.0	50883	850,000	SB, LM, SS
20	015	6063.2	1862.3	50973	900,000	CB, SM, RP
21	015	6063.2	1869.2	51070	970,000	SB, SM, RP
22	015	6064.0	1876.7	51191	1,210,000	SB, LM
23	015	6064.0	1881.3	51255	1,400,000	SB, LM, SS
24	015	6064.0	1885.2	51309	540,000	SB
25	015	6064.0	1893.2	51459	1,500,000	SB
26	015	6064.5	1917.6	51978	5,190,000	SB, LM, SS
27	015	6064.6	1923.1	52068	900,000	SB, WR, CL
28	015	6064.6	1929.3	52157	850,000	SB, WR, CL
29	015	6064.8	1935.8	52256	990,000	SB, LM, SS
30	015	6064.8	1939.7	52311	550,000	SB, LM, SS
31	015	6064.8	1943.6	52358	470,000	SB, SS

Signature: B. B. B. B.

Date: August 1st 13



City of Richmond
Department of Public Utilities - Wastewater Treatment Plant
NINE MINIMUM CONTROL'S REPORT

DOUGLASDALE PUMP STATION
MONTHLY PUMP READINGS

WORK ORDER #

YEAR >

2013

CIRCLE THE MONTH: JAN FEB MAR APR MAY JUNE JULY AUG SEPT OCT NOV DEC

Asset PM Group Name:	WWTP STATIONS
PM ID Number:	854
Asset Numbers:	0001602, 0005152, 0005178, 0005455
Asset Description:	WWTP PUMP STATIONS - HAMPTON, DOUGLASDALE, UPHAMBROOK, MCCLOY
Asset Location:	4 Different Locations Based on Location of Pump Station
PM Frequency:	Monthly

	PUMP #1	PUMP #2	PUMP #3			
DATE	0005210	0005213	0005214	Readings	Flow	NAME
8-1	015	6064.8	1950.6	52473	1,650,000	SB, SS
8-2	015	6065.4	1958.2	52595	1,220,000	SB, SS
8/3/13	015	6065.4	1962.4	52654	590,000	MS, AR, RP
8/4/13	015	6065.4	1966.5	52711	570,000	MS, AR, RP
8-5	015	6065.4	1991.1	53228	5,170,000	SB, SS
8-6	015	6065.8	2011.7	53644	4,160,000	SB, SS
8-7	3539.97	6066.0	2030.1	53925	2,810,000	SB, SS
8-8	3539.97	6066.0	2040.6	54076	5,467,000	SB, SS
8-9	3539.97	6066.0	2047.3	54169	5,416,900	SB, SS
8-10	3539.94	6066.0	2054.3	54265	960,000	CB, RP, DA
8-11	3539.94	6066.0	2071.7	54530	2,650,000	CB, RP, DA
8-12	3540.14	6066.8	2077.9	54621	910,000	SB, CB
8-13	3540.14	6066.8	2091.0	54814	1,430,000	SB, SS, CB
8-14	3540.14	6066.8	2099.1	54931	1,170,000	SB, SS, CB
8-15	3540.14	6066.8	2105.1	55017	860,000	SB, SS, CB
8-16	3540.14	6066.8	2111.7	55110	930,000	SB, SS, CB
8-17	3540.14	6067.0	2117.8	55199	850,000	SB, CB, KA, CL
8-18	3540.14	6067.0	2126.7	55331	1,320,000	SB, KA, CL
8-19	3540.14	6067.0	2134.2	55437	1,040,000	SB, SS, CB
8-20	3540.14	6067.0	2146.8	55619	1,820,000	SB, SS, CB
8-21	3540.14	6067.0	2153.3	55711	920,000	SB, SS, CB
8-22	3540.24	6067.0	2159.7	55806	890,000	SB, SS, CB
8-23	3541.01	6067.0	2168.8	55936	1,364,000	SB, SS, CB
8-24	3544.35	6067.0	2184.4	56207	2,710,000	SB, SM, RP
8-25	3544.35	6067.0	2204.1	56494	1,870,000	SB, SM, RP
8-26	3544.35	6067.0	2214.2	56634	1,400,000	SB, SS, CB
8-27	3552.08	6067.0	2214.7	56727	930,000	CB
8-28	3559.70	6067.0	2214.7	56813	860,000	SB, SS, CB
8-29	3568.55	6067.0	2223.4	57029	2,160,000	SB, BB
8-30	3571.82	6067.1	2229.6	57157	1,220,000	CB, SS
8-31	3571.82	6067.1	2234.9	57231	740,000	FOX, NR, CL

Signature: Steve Blafenz

Date: 9 3 13



City of Richmond
Department of Public Utilities - Wastewater Treatment Plant
NINE MINIMUM CONTROL'S REPORT

DOUGLASDALE PUMP STATION
MONTHLY PUMP READINGS

WORK ORDER # P225287

YEAR > 2013

CIRCLE THE MONTH: JAN FEB MAR APR MAY JUNE JULY AUG SEPT OCT NOV DEC

Asset PM Group Name:	WWTP STATIONS
PM ID Number:	854
Asset Numbers:	0001602, 0005152, 0005178, 0005455
Asset Description:	WWTP PUMP STATIONS - HAMPTON, DOUGLASDALE, UPHAMSBROOK, MCCLOY
Asset Location:	4 Different Locations Based on Location of Pump Station
PM Frequency:	Monthly

	PUMP #1	PUMP #2	PUMP #3	Readings	Flow	NAME
DATE	0005210	0005213	0005214			
1	3571.82	6067.1	2241.3	57321	900,000	FOX, WR, CL
2	3571.82	6067.1	2248.3	57418	970,000	FOX, WR, CL
3	3571.82	6067.1	2256.5	57531	1,130,000	SB, CB
4	3571.82	6067.1	2261.6	57602	710,000	SB, CB
5	3571.82	6067.1	2267.8	57687	850,000	SB
6	3571.82	6067.2	2274.4	57778	910,000	SB, CB, SS
7	3571.82	6067.2	2280.5	57862	840,000	SB, CB, SS
8	3571.82	6067.2	2286.9	57948	860,000	SB, CB, SS
9	3571.82	6067.3	2293.7	58044	960,000	CB
10	3571.89	6068.8	2298.3	58127	830,000	CB
11	3571.89	6074.8	2298.3	58212	850,000	CB
12	3572.02	6081.0	2298.3	58308	880,000	CB
13	015	6087.5	2298.3	58391	910,000	SS
14	015	6087.5	2310.3	58596	2,050,000	SB, RP, AR
15	015	6087.5	2316.5	58682	860,000	SB, RP, AR
16	015	6087.5	2323.1	58774	920,000	SB, CB
17	015	6087.5	2329.2	58860	960,000	SB, CB, SS
18	015	6087.5	2335.0	58942	820,000	SB, CB, SS
19	3577.93	6087.5	2337.8	59027	850,000	SB, CB
20	3578.58	6093.5	2339.7	59125	980,000	SS
9/21/13	3578.58	6094.7	2343.7	59191	660,000	MS, CL, DA
9/22/13	3578.58	6097.8	2351.2	59342	1,520,000	MS, PA, CL
9/23/13	3578.58	6101.0	2351.8	59404	1,052,000	CB, SG
9/24/13	3578.59	6116.1	2353.8	59675	2,010,000	CB, SG
9/25/13	3578.58	6119.2	2356.7	59756	810,000	CB, SG
9-26-13	3578.58	6128.2	2358.7	59810	810,000	SS
9-27-13	3578.58	6123.3	2360.8	59867	8670,000	SS
9-28	3578.58	6125.2	2362.6	59915	480,000	SB, SM, RP
9-29	3578.58	6127.2	2364.4	59967	520,000	SB, SM, RP
9-30	3578.58	6129.2	2366.6	60025	580,000	SB, CB

Signature: Steve Blum

Date: 9-30-13



City of Richmond
Department of Public Utilities - Wastewater Treatment Plant
NINE MINIMUM CONTROL'S REPORT

DOUGLASDALE PUMP STATION
MONTHLY PUMP READINGS

WORK ORDER #

P223644

YEAR >

2013

CIRCLE THE MONTH: JAN FEB MAR APR MAY JUNE JULY AUG SEPT **(OCT)** NOV DEC

Asset PM Group Name: WWTP STATIONS

PM ID Number: 854

Asset Numbers: 0001602, 0005152, 0005178, 0005455

Asset Description: WWTP PUMP STATIONS - HAMPTON, DOUGLASDALE, UPHAMSBROOK, MCCLOY

Asset Location: 4 Different Locations Based on Location of Pump Station

PM Frequency: Monthly

DATE	PUMP #1 0005210	PUMP #2 0005213	PUMP #3 0005214	Readings	Flow	NAME
10-1	3578.58	6131.3	2368.5	60080	550,000	SB, CB
10-2	3578.58	6133.2	2370.4	6132	520,000	SB, CB
10-3	3578.58	6135.2	2372.6	6188	560,000	SB, CB
10-4	3578.58	6137.0	2374.3	60238	500,000	SB, CB
10-5	3578.58	6140.8	2374.8	60295	570,000	SB, CB
10-6	3578.58	6144.8	2374.8	60351	560,000	SB, CB
10-7	3578.58	6149.4	2374.8	60414	630,000	SB, CB
10-8	3578.58	6155.1	2374.9	60500	860,000	SB, CB
10-9	3578.58	6159.1	2374.9	60557	570,000	SB, CB
10-10	O/S	6174.9	2378.1	60847	3,900,000	SB, CB
10-11	O/S	6186.7	2378.5	61022	1,750,000	SB, CB, SG
10-12	O/S	6197.3	2378.7	61172	1,500,000	SB, CB
10-13	O/S	6206.6	2378.7	61298	1,260,000	SB, CB
10-14	O/S	6214.4	2378.7	61410	1,120,000	SB, CB
10-15	O/S	6219.7	2378.7	61483	730,000	SB, CB
10-16	3581.5	6230.8	2378.7	61655	1,720,000	SB, CB
10-17	3589.43	6230.8	2378.7	61724	690,000	SB
10-18	3600.50	6230.8	2378.7	61820	960,000	SB
19	3612.92	6230.8	2378.7	61924	1,040,000	FOX, DA, RP
20	3625.18	6230.8	2378.7	62030	1,060,000	FOX, DA, RP
21	3638.64	6230.8	2378.7	62142	1,120,000	SB
22	3650.58	6231.6	2378.9	62239	970,000	SB
23	3657.42	6232.2	2379.0	62292	530,000	SB, CB
24	3663.45	6232.2	2379.0	62342	500,000	SB
25	3669.53	6232.2	2379.0	62393	510,000	SB
26	3670.69	6232.2	2382.9	62455	620,000	FOX, SM, CL
27	3670.69	6232.2	2388.2	62528	730,000	FOX, DA, CL
28	3670.69	6232.2	2394.1	62607	790,000	SB, CB
29	3676.69	6232.2	2399.7	62683	760,000	SB, CB
30	3671.55	6232.3	2407.1	62791	1,080,000	SB
31	3680.92	6232.3	2407.2	62871	800,000	SB, CB

Signature: Steven Blakney

Date: 10-31-13



City of Richmond
Department of Public Utilities - Wastewater Treatment Plant
NINE MINIMUM CONTROL'S REPORT

DOUGLASDALE PUMP STATION
MONTHLY PUMP READINGS

WORK ORDER #

P225723

YEAR >

2013

CIRCLE THE MONTH: JAN FEB MAR APR MAY JUNE JULY AUG SEPT OCT NOV DEC

Asset PM Group Name: WWTP STATIONS

PM ID Number: 864

Asset Numbers: 0001802, 0005152, 0005178, 0005455

Asset Description: WWTP PUMP STATIONS - HAMPTON, DOUGLASDALE, UPHAMBROOK, MCCLOY

Asset Location: 4 Different Locations Based on Location of Pump Station

PM Frequency: Monthly

	PUMP #1	PUMP #2	PUMP #3			
DATE	0005210	0005213	0005214	Readings	Flow	NAME
11-1	3687.14	6232.3	2407.2	62922	510,000	SB
11-2	3697.14	6232.3	2407.2	63004	820,000	SB, SM, RP
11-3	3707.95	6232.3	2407.2	63090	860,000	SB, SM, RP
11-4	3719.03	6232.3	2407.2	63178	880,000	CB
11-5	3730.54	6232.3	2407.5	63245	870,000	SB, CB
11-6	3733.80	6235.7	2411.8	63390	1260,000	CB, SB
11-7	3733.80	6238.8	2415.0	63475	850,000	CB
11-8	3734.59	6241.3	2417.6	63550	550,000	SB, CB
11-9	3734.59	6244.5	2420.7	63635	850,000	CB, CL, WR, TB
11-10	3734.59	6247.0	2423.3	63703	680,000	CB, CL, WR, TB
11-11	3734.59	6249.5	2425.9	63772	690,000	SB, CB
11-12	3734.59	6251.8	2428.3	63836	640,000	SB, BB
11-13	3734.59	6254.9	2431.3	63918	820,000	SB, CB
11-14	3734.59	6257.1	2433.8	63982	640,000	SB, CB
11-15	3734.59	6259.8	2436.5	64054	720,000	SB, CB
11-16	3734.78	6263.7	2441.5	64177	123,000	MS, MS, AR
11-17	3734.78	6265.8	2443.8	64238	610,000	MS, AR
11-18	3734.78	6268.9	2446.9	64322	840,000	SB, CB
11-19	3734.78	6271.3	2449.3	64387	650,000	CB, SB
11-20	3734.78	6273.7	2451.7	64453	660,000	SB, CB
11-21	3734.78	6276.6	2454.6	64531	780,000	CB
11-22	3734.78	6281.3	2459.6	64663	1,300,000	SB
11-23	3734.78	6287.3	2465.7	64814	1,560,000	CB, RP, PA
11-24	3734.78	6286.7	2478.1	65001	1,870,000	CB, RP, PA
11-25	3734.78	6286.7	2489.1	65155	1,540,000	SB, CB
11-26	3734.78	6286.7	2497.4	65271	1,160,000	SB, CB
11-27	3753.91	6300.11	2497.7	105	451,600,000	SB, RP
11-28	3753.94	6305.8	2507.5	342	237,000,000	CB, RP, PA
11-29	3753.94	6311.0	2512.3	474	1,320,000	SB, CB, RP, PA
11-30	3753.94	6316.3	2517.3	611	1,370,000	SB, CB, DA

Signature: Steven Blakely

Date: Dec 2 13



City of Richmond
Department of Public Utilities - Wastewater Treatment Plant
NINE MINIMUM CONTROL'S REPORT

DOUGLASDALE PUMP STATION
MONTHLY PUMP READINGS

WORK ORDER# **P225755**

YEAR > 2013

CIRCLE THE MONTH: JAN FEB MAR APR MAY JUNE JULY AUG SEPT OCT NOV **DEC**

Asset PM Group Name:	WWTP STATIONS
PM ID Number:	854
Asset Numbers:	0001602, 0005152, 0005178, 0005455
Asset Description:	WWTP PUMP STATIONS - HAMPTON, DOUGLASDALE, UPHAMSBROOK, MCCLOY
Asset Location:	4 Different Locations Based on Location of Pump Station
PM Frequency:	Monthly

DATE	PUMP #1 0005210	PUMP #2 0005213	PUMP #3 0005214	Readings	Flow	NAME
12-1	3753.94	6319.4	2519.8	682	710,000	SB, CB, DT
12-2	3753.94	6322.7	2522.6	757	750,000	SB, CB
12-3	3753.94	6325.8	2525.2	826	690,000	SB, CB
12-4	3753.94	6332.1	2531.5	994	1,680,000	SB
12-5	3753.94	6338.2	2537.2	1148	1,540,000	SB
12-6	3753.94	6342.5	2541.3	1258	1,100,000	SB
7	3753.94	6349.5	2545.6	1416	1,580,000	FOX, JM, RP
8	3753.94	6354.9	2550.2	1544	1,280,000	FOX, JM, RP
9	3753.94	6361.5	2562.2	1832	2,880,000	SB, CB
10	3753.94	6371.3	2570.4	2110	2,780,000	SB
11	3753.94	6383.6	2570.4	2276	1,600,000	SB
12	3753.94	6392.8	2570.4	2397	1,270,000	SB
13	3754.52	6396.3	2573.2	2485	880,000	SB, CB
14	3754.67	6398.3	2575.2	2538	2,538,000	DT, CB, 2
15	3754.67	6409.4	2579.6	2778	2,778,000	DT, CB, 2
16	3754.67	6413.8	2585.0	2900	1,220,000	SB, CB
17	3754.67	6416.9	2588.1	2981	810,000	SB, CB
18	3769.19	6425.3	2588.8	3263	2,820,000	SB, CB
19	3769.19	6437.9	2588.8	3442	1,790,000	SB, CB
20	3771.25	6444.2	2588.8	3550	1,080,000	CB
21	3776.39	6444.2	2588.8	3606	560,000	SB, CB, MSAR
22	3781.60	6444.2	2588.8	3663	570,000	SB, MS, AR
23	3784.68	6444.4	2599.9	3853	1,900,000	SB, CB, AR
24	3784.68	6444.4	2619.9	4159	3,060,000	SB, CB, AR
25	3784.68	6444.4	2630.9	4315	1,560,000	SB, CB, AR
26	3784.68	6444.4	2636.4	4387	720,000	SB, CB
27	3784.68	6444.4	2642.2	4464	770,000	SB, CB
28	3784.68	6444.4	2647.7	4536	920,000	CB DT RP
29	3784.68	6444.4	2655.9	4656	1,200,000	CB DT RP
30	3788.81	6444.4	2668.4	4871	2,150,000	SB, CB
31	3788.81	6444.4	2679.8	5028	1,570,000	SB, CB

Signature: Steve Blakney

Date: 12-31-13



City of Richmond
Department of Public Utilities - Wastewater Treatment Plant
NINE MINIMUM CONTROL'S REPORT

**HAMPTON PUMP STATION
MONTHLY PUMP READINGS**

WORK ORDER #

2223597

YEAR >

2013

CIRCLE THE MONTH: JAN FEB MAR APR MAY JUNE JULY AUG SEPT OCT NOV DEC

Asset PM Group Name: WWTP STATIONS

PM ID Number: 854

Asset Numbers: 0001602, 0005152, 0005178, 0005455

Asset Description: WWTP PUMP STATIONS - HAMPTON, DOUGLASADLE, UPHAMBROOK, MCCLOY

Asset Location: 4 Different Locations Based on Location of Pump Station

PM Frequency: Monthly

	PUMP #1	PUMP #2	PUMP #3			
DATE	0005133	0005134	N/A	Readings	Flow	NAME
1-1-13	13154.4	14055.0	N/A	148947228	24308	OB SM
1-2-13	13155.9	14055.4	N/A	148978701	29473	LM MS SB
1-3-13	13155.9	14055.6	N/A	148996443	17742	LM MS
1-4-13	13155.9	14056.9	-	149018778	22335	SB, LM, MS
1-5-13	13156.0	14056.1	N/A	149027670	8892	Fox, AR, SS
1-6-13	13156.2	14056.4	N/A	149047912	20242	Fox, AR, SS
1-7-13	13156.6	14056.8	-	149074605	26693	SB, LM, MS
1-8-13	13156.7	14057.0	N/A	149090227	15622	MS, LM, SB
1-9-13	13157.3	14057.0	N/A	149110299	20072	LM MS
1-10-13	13157.5	14057.0	-	149125402	15103	SB, LM, MS
1-11-13	13158.1	14057.0	-	149142799	17397	SB, LM, MS
1-12-13	13158.4	14057.2	-	149160952	18153	SB, DA, RP
1-13-13	13158.7	14057.5	-	149178706	17754	SB, DA, RP
1-14-13	13159.1	14058.0	-	149214013	35307	SB, LM, MS
1-15-13	13161.9	14060.4	-	149393677	79664	SB, MS
1-16-13	13164.8	14062.6	-	149571352	178855	SB, LM, MS
1-17-13	13166.2	14064.2	-	149679513	107041	SB, LM, MS
1-18-13	13168.2	14066.5	-	149833074	153501	SB, LM, MS
1-19-13	13168.5	14066.8	-	149850744	17670	MS, PA, RP
1-20-13	13168.8	14067.1	-	149872971	22227	MS, PA, RP
1-21-13	13169.1	14067.5	-	149897409	24438	RP, PA, MS
1-22-13	13169.5	14068.0	-	149928929	31520	LM, MS, SB
1-23-13	13169.8	14068.2	-	149949064	20135	MS, LM, SB
1-24-13	13170.1	14068.5	-	149969128	20068	LM MS
1-25-13	13170.4	14068.9	-	149993636	24508	LM, MS, SB
1-26-13	13170.6	14069.1	-	150009435	15799	MS, MS, SM
1-27-13	13171.0	14069.5	-	150036210	26775	MS, MS, SM
1-28-13	13171.5	14070.1	-	150077641	41431	MS, LM, SB
1-29-13	13171.8	14070.5	-	150104222	26581	SB, LM, MS
1-30-13	13171.9	14071.6	-	150136875	31653	SB, MS, LM
1-31-13	13172.0	14071.3	-	150158669	21794	MS, LM, SB

Signature:

Date: Feb 5 13

City of Richmond
Department of Public Utilities - Wastewater Treatment Plant
NINE MINIMUM CONTROL'S REPORT

HAMPTON PUMP STATION MONTHLY PUMP READINGS

WORK ORDER #

P223738

YEAR >

2012 2013

CIRCLE THE MONTH: JAN (FEB) MAR APR MAY JUNE JULY AUG SEPT OCT NOV DEC

Asset PM Group Name: WWTP STATIONS

PM ID Number: 854

Asset Numbers :	0001602, 0005152, 0005178, 0005455
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Asset Description:	WWTP PUMP STATIONS - HAMPTON, DOUGLASADLE, UPHAMBROOK, MCCLOY
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Asset Location:	4 Different Locations Based on Location of Pump Station
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PM Frequency: Monthly

	PUMP #1	PUMP #2	PUMP #3			
DATE	0005133	0005134	N/A	Readings	Flow	NAME
2-1-13	13172.9	14071.5	-	150169566	10,897	SB, LM, MS
2-2-13	13192.0	14071.8	-	150187051	17,485	CB, WR, SB
2-3-13	13172.6	14071.9	-	150195796	8,745	CB, WR, SB
2-4-13	13172.9	14071.9	-	150204558	8,754	SB, LM, MS
2-5-13	13171.9	14072.1	-	150211069	6,519	LM, MS
2-6-13	13171.9	14072.5	-	150239652	28,583	SB, LM, MS
2-7-13	13171.9	14072.8	-	150262401	22,749	SB, LM, MS
2-8-13	13171.9	14074.8	-	150388722	124,321	SB, LM, MS
2-9-13	13171.9	14075.1	-	150403968	16,246	CB, SB, AR
2-10-13	13171.9	14075.5	-	150428006	24,038	CB, SB, AR
2-11-13	13171.9	14076.0	-	150456568	28,562	SB, LM, MS
2-12-13	13171.9	14076.3	-	150474032	17,454	LM, MS
2-13-13	13171.9	14076.6	-	150496316	39,748	SB, LM, MS
2-14-13	13171.9	14077.0	-	150518505	22,189	SB, LM
2-15-13	13171.9	14077.2	-	150536293	17,788	SB, MS
2-16-13	13171.9	14077.5	-	150556265	19,972	SB, SS, DA
2-17-13	13171.9	14077.9	-	150588010	31,745	SB, SS, DA
2-18-13	13171.9	14078.3	-	150612966	24,454	SB, SS, DA
2-19-13	13171.9	14078.7	-	150639296	26,830	SB, LM, MS
2-20-13	13171.9	14079.1	-	150665627	26,331	SB, LM, MS
2-21-13	13171.9	14079.3	-	150683225	17,628	SB, LM
2-22-13	13171.9	14079.7	-	150705315	22,090	SB, LM
2-23-13	13171.9	14080.1	-	150730746	25,181	CB, RP, PA
2-24-13	13171.9	14080.4	-	150752897	22,401	CB, RP, PA
2-25-13	13171.9	14080.9	-	150782392	30,145	SB, LM, MS
2-26-13	13172.2	14081.2	-	150802843	19,551	SB, LM, MS
2-27-13	13173.2	14082.5	-	150899077	97,234	SB, LM, MS
2-28-13	13173.5	14083.3	-	150922700	23,623	SB, LM

Signature:

Date:

2-28-13



City of Richmond
Department of Public Utilities - Wastewater Treatment Plant
NINE MINIMUM CONTROL'S REPORT

**HAMPTON PUMP STATION
MONTHLY PUMP READINGS**

WORK ORDER #

P224108

YEAR >

~~2012~~ 2013

CIRCLE THE MONTH: JAN FEB MAR APR MAY JUNE JULY AUG SEPT OCT NOV DEC

Asset PM Group Name:	WWTP STATIONS
PM ID Number:	854
Asset Numbers:	0001602, 0005152, 0005178, 0005455
Asset Description:	WWTP PUMP STATIONS - HAMPTON, DOUGLASADLE, UPHAMBROOK, MCCLOY
Asset Location:	4 Different Locations Based on Location of Pump Station
PM Frequency:	Monthly

	PUMP #1	PUMP #2	PUMP #3			
DATE	0005133	0005134	N/A	Readings	Flow	NAME
3-1-13	13173.9	14083.0	-	150946374	23,674	SB, LM, MS
3-2-13	13174.1	14083.8	-	150958160	11,784	SB, SM, RP
3-3-13	13174.3	14084.2	-	150981836	23,670	SB, SM, RP
3-4-13	13174.6	14084.4	-	151003504	21,674	SB, LM, MS
3-5-13	13174.8	14084.7	-	151025187	21,683	SB, LM, MS
3-6-13	13179.1	14087.5	-	151266018	246,831	SB, LM, MS
3-7-13	13180.4	14096.0	-	151420722	154,704	SB, LM, MS
3-8-13	13180.8	14091.3	-	151446840	26,118	SB
3-9-13	13181.0	14091.8	-	151472001	25,161	MS
3-10-13	13181.3	14092.1	-	151491802	19,801	MS
3-11-13	13181.7	14092.4	-	151519444	27,644	SB
3-12-13	13182.2	14093.0	-	151557971	38,525	SB, LM, MS
3-13-13	13182.9	14093.8	-	151611472	53,501	SB, LM, MS
3-14-13	13183.2	14094.0	-	151629444	18,172	SB
3-15-13	13183.5	14094.4	-	151652177	22,533	SB
3-16-13	13183.8	14094.7	-	151674079	21,902	MS, MS, AP
3-17-13	13183.8	14095.3	-	151741586	67,507	MS, MS, AP
3-18-13	13185.9	14096.4	-	151806641	65,055	SB
3-19-13	13186.4	14097.0	-	151846974	40,333	SB, MS
3-20-13	13186.7	14097.4	-	151868674	21,700	SB, LM, MS
3-21-13	13186.9	14097.8	-	151890352	31,678	LM, MS
3-22-13	13187.2	14098.1	-	151912133	21,781	SB
3-23-13	13187.5	14098.4	-	151931900	19,767	CB, DA, RP
3-24-13	13187.8	14098.7	-	151955518	23,618	CB, DA, RP
3-25-13	13188.5	14099.6	-	15202657	57,139	SB, LM, MS
3-26-13	13188.8	14099.8	-	152032445	19,788	SB
3-27-13	13189.1	14100.1	-	152052219	19,774	LM, MS
3-28-13	13189.4	14100.4	-	152075853	23,634	SB, LM, MS
3-29-13	13189.7	14100.7	-	152091562	15,709	SB, CB, KA, RP
3-30-13	13189.9	14100.9	-	152109250	17,688	SB, KA, CL
3-31-13	13190.2	14101.2	-	152136961	21,651	SB, KA, CL

Signature: [Signature]

Date: 4/2/13



City of Richmond
Department of Public Utilities - Wastewater Treatment Plant
NINE MINIMUM CONTROL'S REPORT

**HAMPTON PUMP STATION
MONTHLY PUMP READINGS**

WORK ORDER #

0824109

YEAR >

2012

CIRCLE THE MONTH: JAN FEB MAR APR MAY JUNE JULY AUG SEPT OCT NOV DEC

Asset PM Group Name: WWTP STATIONS

PM ID Number: 854

Asset Numbers: 0001602, 0005152, 0005178, 0005455

Asset Description: WWTP PUMP STATIONS - HAMPTON, DOUGLASDALE, UPHAMBROOK, MCCLOY

Asset Location: 4 Different Locations Based on Location of Pump Station

PM Frequency: Monthly

	PUMP #1	PUMP #2	PUMP #3			
DATE	0005133	0005134	N/A	Readings	Flow	NAME
4-1	13190.9	14102.2	-	152196923	60,022	SB, LM, MS
4-2	13191.3	14102.5	-	152214552	25,629	SB
4/3/13	13191.5	14102.7	-	152232369	15,817	MS, LM
4-4	13191.7	14103.0	-	152251978	19,609	SB, LM, MS
4-5	13193.2	14104.9	-	152367923	115,945	SB, LM
4-6	13193.5	14105.2	N/A	152389549	21,826	STONE, FOX, PERGAS
4-7	13193.8	14105.5	N/A	152411738	21,989	STONE, FOX, PERGAS
4-8	13194.2	14105.9	-	152441535	29,797	SB, LM, MS
4-9	13194.5	14106.2	-	152459088	17,553	MS, LM
4-10	13194.7	14106.4	-	152476788	17,700	SB, LM, MS
4-11	13195.0	14106.7	-	152496553	19,745	SB, LM, MS
4-12	13195.3	14107.0	-	152518932	22,379	SB, LM, MS
4-13	13196.4	14108.2	-	152595090	74,158	SB, CB, WR
4-14	13196.6	14108.5	-	152614761	19,671	SB, CB, WR
4-15	13197.0	14108.8	-	152638383	23,622	SB
4-16	13197.2	14109.2	-	152657925	19,540	SB, LM
4-17	13197.4	14109.5	-	152681422	23,499	SB, LM, MS
4-18-13	13197.6	14109.8	N/A	152699225	17803	LM, MS, SB
4-19	13198.6	14110.2	-	152722796	23,571	SB, LM, MS
4-20	13198.8	14111.4	-	152806674	83,278	SB, CB, AR
4-21	13199.1	14112.8	-	152827794	21,720	SB, CB, AR
4-22	13199.3	14112.2	-	152845872	18,078	SB
4-23	13199.6	14112.6	-	152869648	23,776	SB
4-24	13199.8	14112.8	-	152886723	17,565	SB
4-25	13200.1	14113.1	-	152906929	19,716	SB, LM, MS
4-26	13200.3	14113.4	-	152924443	17,514	SB
4/27/13	13200.5	14113.6	N/A	152938142	13,699	MS, RP, DA
4/28/13	13200.7	14114.0	N/A	152957678	21,536	MS, RP, DA
4-29	13201.8	14115.6	-	153048757	91,079	SB, LM, MS
4-30	13202.5	14116.7	-	153113221	69,464	SB, LM, MS

Signature: B. Bechler

Date: 5-1-13



City of Richmond
Department of Public Utilities - Wastewater Treatment Plant
NINE MINIMUM CONTROL'S REPORT

HAMPTON PUMP STATION
MONTHLY PUMP READINGS

WORK ORDER #

1224365

YEAR >

2013

CIRCLE THE MONTH: JAN FEB MAR APR MAY JUNE JULY AUG SEPT OCT NOV DEC

Asset PM Group Name:	WWTP STATIONS
PM ID Number:	854
Asset Numbers:	0001602, 0005152, 0005178, 0005455
Asset Description:	WWTP PUMP STATIONS - HAMPTON, DOUGLASADLE, UPHAMBROOK, MCCLOY
Asset Location:	4 Different Locations Based on Location of Pump Station
PM Frequency:	Monthly

	PUMP #1	PUMP #2	PUMP #3			
DATE	0005133	0005134	N/A	Readings	Flow	NAME
5-1-13	13202.7	14117.0	-	153131043	17,822	SB, LM, MS
5-2	13202.9	14117.3	-	153150745	19,722	SB, LM, MS
5-3	13203.0	14117.4	-	153166596	15,831	SB, LM, MS
5-4	13203.1	14117.4	-	153178336	11,740	CB, CL, SM
5-5	13203.2	14118.3	-	153166030	17,644	CB, CL, SM
5-6	13203.4	14118.7	-	153219468	23,438	SB, LM, MS
5-7-13	13204.1	14120.3	-	153296632	77,164	LM, MS
5-8-13	13205.1	14122.0	-	153343472	97,740	LM, BR
5-9-13	13205.6	14122.8	-	153435012	41,530	LM, MS
5-10-13	13205.9	14123.1	-	153456819	21,807	LM, MS
5-11-13	13206.0	14123.4	-	153472662	15,844	MS, RP, DA
5-12-13	13206.1	14123.7	-	153492203	19,640	MS, RP, DA
5-13-13	13206.5	14124.0	-	153513985	21,682	SB, LM, MS
5-14-13	13206.7	14124.1	-	153527821	13,836	LM, MS
5-15	13207.0	14124.4	-	153547516	19,695	SB, LM, MS
5-16	13207.2	14124.6	-	153563503	15,987	SB, LM, MS
5-17	13207.7	14125.1	-	153596599	33,096	SB, LM
5-18	13208.3	14126.0	-	153651854	55,255	SB, CL
5-19	13208.8	14126.7	-	153699382	47,528	SB, CL
5-20	13209.3	14127.0	-	153721367	21,985	SB, LM
5-21	13209.5	14127.3	-	153743084	21,667	SB, LM
5-22	13209.8	14127.5	-	153761033	18,999	SB, LM
5-23	13210.0	14127.8	-	153777209	16,174	SB, LM
5-24	13210.7	14128.4	-	153823184	45,975	SB, LM
5-25	13210.9	14128.7	N/A	153841212	18,028	FOX, CB, AR
5-26	13211.1	14129.0	N/A	153858967	17,755	FOX, CB, AR
5-27	13211.4	14129.2	N/A	153876899	17,932	FOX, AR, CB
5-28	13211.7	14129.5	-	153898576	21,697	SB, LM, MS
5-29	13211.9	14129.8	-	153918316	19,720	SB, LM, MS
5-30	13212.1	14130.1	-	153937810	19,494	SB, LM, MS
5-31	13212.4	14130.4	-	153957541	19,731	SB, LM, MS

Signature: [Signature]

Date: 6-4-13



City of Richmond
Department of Public Utilities - Wastewater Treatment Plant
NINE MINIMUM CONTROL'S REPORT

**HAMPTON PUMP STATION
MONTHLY PUMP READINGS**

WORK ORDER #

P 22637

YEAR >

2013

CIRCLE THE MONTH: JAN FEB MAR APR MAY JUNE JULY AUG SEPT OCT NOV DEC

Asset PM Group Name:	WWTP STATIONS
PM ID Number:	854
Asset Numbers:	0001602, 0005152, 0005178, 0005455
Asset Description:	WWTP PUMP STATIONS - HAMPTON, DOUGLASADLE, UPHAMBROOK, MCCLOY
Asset Location:	4 Different Locations Based on Location of Pump Station
PM Frequency:	Monthly

DATE	PUMP #1 0005133	PUMP #2 0005134	PUMP #3 N/A	Readings	Flow	NAME
6-1	13212.5	14130.5	N/A	153968765	11,224	FOX, PA, RP
6-2	13212.8	14130.8	N/A	153987010	18,245	FOX, PA, RP
6-3	13213.2	14131.7	-	154036334	49,324	SB, LM, MS
6-4	13213.5	14132.0	-	154056049	19,715	SB, LM, MS
6-5	13213.7	14132.3	-	154075777	19,728	SB, LM, MS
6-6	13213.9	14132.6	-	154093625	17,848	SB, LM, MS
6-7	13214.2	14133.0	-	154115733	22,108	SB, LM, MS
6-8	13218.6	14139.0	-	154441291	325,558	SB, KA, CL
6-9	13220.0	14140.7	-	154541575	100,284	SB, KA, CL
6-10	13220.3	14141.0	-	154564540	23,915	SB, LM, MS
6-11	13221.7	14142.0	-	154660240	94,750	SB, LM
6-12	13222.9	14142.8	-	154682696	21,856	SB, LM, MS
6-13	13222.3	14143.2	-	154705794	23,700	SB, LM, MS
6-14	13222.7	14143.8	-	154740193	34,399	SB, LM, MS
6/15/13	13222.9	14144.1	-	154758175	17,986	MS, SM, RP
6/16/13	13223.2	14144.4	-	154780107	21,928	MS, RP, SM
6-17	13223.6	14145.0	-	154820081	35,974	SB, LM, MS
6/18/13	13224.0	14145.4	-	154847727	27,646	MS, LM, SB
6-19	13224.5	14146.2	-	154897840	50,119	SB, LM, MS
6-20	13224.8	14146.4	-	154913700	15,854	SB, LM, MS
6-21	13224.9	14146.8	-	154933523	19,823	SB, LM, MS
6-22-13	13225.2	14147.0	-	154949283	15,760	MS, CL, WR
6-23-13	13225.3	14147.1	-	154957250	7,967	MS, CL, WR
6-24-13	13225.4	14147.2	-	154963073	58,23	LM
6-25	13225.5	14147.5	-	154982152	19,079	SB, LM, MS
6-26	13225.8	14149.8	-	155001755	19,603	SB, LM, MS
6-27	13226.2	14148.2	-	155034565	32,810	SB, LM, MS
6-28	13226.4	14148.5	-	155052002	17,437	SB, LM, MS
6-29	13226.8	14148.8	-	155076253	24,251	CB, SB, AR
6-30	13227.1	14149.2	-	155097993	21,740	CB, SB, AR

Signature: *[Signature]*

Date: 6 30 13



City of Richmond
Department of Public Utilities - Wastewater Treatment Plant
NINE MINIMUM CONTROL'S REPORT

HAMPTON PUMP STATION
MONTHLY PUMP READINGS

WORK ORDER #

P226813

YEAR >

2013

CIRCLE THE MONTH: JAN FEB MAR APR MAY JUNE JULY AUG SEPT OCT NOV DEC

Asset PM Group Name: WWTP STATIONS

PM ID Number: 854

Asset Numbers: 0001602, 0005152, 0005178, 0005455

Asset Description: WWTP PUMP STATIONS - HAMPTON, DOUGLASDALE, UPHAMSBROOK, MCCLOY

Asset Location: 4 Different Locations Based on Location of Pump Station

PM Frequency: Monthly

DATE	PUMP #1	PUMP #2	PUMP #3	Readings	Flow	NAME
	0005133	0005134	N/A			
7-1-13	13228.3	14150.4	-	155190388	92,395	SB, LM, SG
7-2	13229.8	14152.4	-	155306839	110,481	SB, LM, SG
7-3	13230.2	14152.8	-	155327712	26,873	SB, LM, SG
7-4	13231.1	14153.7	-	155389231	61,519	SB, CB
7-5	13231.4	14154.0	-	155412874	23,643	SB, LM, SG
7-6	13231.4	14154.4	-	155432655	19,821	SB, KA, RP
7-7	13231.8	14154.7	-	155456502	17,807	SB, KA, RP
7-8	13232.1	14155.0	-	155474448	23,940	SB, LM, SG
7-9	13232.4	14155.3	-	155496230	21,782	SB, LM, SG
7-10	13232.6	14155.8	-	155521913	25,683	SB, LM, SG
7-11	13234.3	14158.0	-	155656091	134,178	SB, LM, SG
7-12	13235.4	14159.0	-	155731295	75,204	SB, LM, SG
7-13	13235.6	14159.4	N/A	155751157	19,862	FOX, DA, CL
7-14	13235.9	14159.6	N/A	155772351	22,194	FOX, DA, CL
7-15	13236.3	14160.0	-	155801099	27,748	SB, LM, SG
7-16	13236.5	14160.4	-	155822796	21,697	SB, SS
7-17	13236.8	14160.6	-	155842419	19,673	SB, LM, SG
7-18	13237.0	14160.9	-	155862303	19,834	SB, LM, SG
7-19	13237.3	14161.2	-	155881862	19,559	SB, LM, SG
7-20	13237.5	14161.4	-	155909544	13,512	CB, SM, RP
7-21	13237.8	14161.7	-	155919146	23,702	SB, SM, RP
7-22	13238.5	14162.8	-	155979715	60,769	SB, LM
7-23	13239.3	14163.7	-	156038305	58,390	SB, LM, SS
7-24	13239.4	14163.9	-	156050200	11,895	SB
7-25	13239.6	14164.2	-	156067852	17,652	SB
7-26	13239.9	14164.4	-	156093518	25,666	SB
7-27	13240.1	14164.8	-	156107140	13,622	SB, WR, CL
7-28	13240.4	14165.1	-	156132633	25,493	SB, WR, CL
7-29	13241.6	14166.2	-	156210107	77,474	SB, LM, SS
7-30	13241.8	14166.6	-	156230885	20,778	SB, LM, SS
7-31	13242.1	14166.8	-	156250704	19,819	SB, SS

Signature: DB Bailey

Date: August 1st 13



City of Richmond
Department of Public Utilities - Wastewater Treatment Plant
NINE MINIMUM CONTROL'S REPORT

**HAMPTON PUMP STATION
MONTHLY PUMP READINGS**

WORK ORDER #

YEAR >

2013

CIRCLE THE MONTH: JAN FEB MAR APR MAY JUNE JULY AUG SEPT OCT NOV DEC

Asset PM Group Name:	WWTP STATIONS
PM ID Number:	854
Asset Numbers:	0001602, 0005152, 0005178, 0005455
Asset Description:	WWTP PUMP STATIONS - HAMPTON, DOUGLASADLE, UPHAMBROOK, MCCLOY
Asset Location:	4 Different Locations Based on Location of Pump Station
PM Frequency:	Monthly

	PUMP #1	PUMP #2	PUMP #3			
DATE	0005133	0005134	N/A	Readings	Flow	NAME
8-1	13243.2	14168.0	-	156334594	83,890	SB, SS
8-2	13243.5	14168.4	-	156356970	22,376	SB, SS
8-3-13	13243.8	14168.6	-	156378180	21,672	MS, AR, RP
8-4-13	13244.1	14169.0	-	156398302	19,660	MS, AR, RP
8-5	13244.4	14169.2	-	156422080	23,778	SB, SS
8-6	13244.6	14169.5	-	156441614	19,534	SB, SS
8-7	13244.7	14169.6	-	156447339	5,725	SB, SS
8-8	13244.9	14169.9	N/A	156463152	15,813	ST
8-9	13245.2	14170.5	-	156482687	19,535	ST
8-10	13245.4	14170.4	-	156498360	15,623	CB DA BP
8-11	13245.6	14170.6	-	156513743	15,433	CB DA BP
8-12	13245.8	14170.8	-	156531095	17,352	SB, CB
8-13	13246.0	14171.0	-	156546711	15,622	SB, SS, CB
8-14	13246.2	14171.2	-	156562367	15,650	SB, SS, CB
8-15	13246.4	14171.5	-	156579869	17,502	SB, SS, CB
8-16	13246.6	14171.6	-	156589411	9,548	SB, SS, CB
8-17	13246.6	14171.6	-	156593312	3,895	SB, CB, KA, CL
8-18	13246.7	14171.7	-	156597159	3,847	SB, KA, CL
8-19	13246.7	14171.7	-	156597159	0	SB, SS, CB
8-20	13247.0	14172.1	-	156621146	23,957	SB, SS, CB
8-21	13247.2	14172.4	-	156638720	17,604	SB, SS, CB
8-22	13256.4	14181.6	-	156646986	8,244	SB, SS, CB
8-23	13279.7	14204.9	-	156656430	9,464	SB, SS, CB
8-24	13281.5	14208.1	-	156748336	91,906	SB, SM, RP
8-25	13281.8	14208.4	-	156776065	27,729	SB, SM, RP
8-26	13282.3	14208.9	-	156807288	31,223	SB, SS, CB
8-27	13282.8	14209.2	-	156838446	31,138	CB
8-28	13282.9	14209.4	-	156852203	13,777	SB, SS, CB
8-29	13283.9	14210.4	-	156922190	69,987	SB
8-30	13284.2	14212.5	-	156947916	25,624	CB, SS
8-31	13284.4	14211.1	N/A	156961621	13,805	FOX, NR, CL

Signature:

Steven Bluford

Date:

9 3 13



City of Richmond
Department of Public Utilities - Wastewater Treatment Plant
NINE MINIMUM CONTROL'S REPORT

**HAMPTON PUMP STATION
MONTHLY PUMP READINGS**

WORK ORDER #

P225287

YEAR >

2013

CIRCLE THE MONTH: JAN FEB MAR APR MAY JUNE JULY AUG (SEPT) OCT NOV DEC

Asset PM Group Name:	WWTP STATIONS
PM ID Number:	854
Asset Numbers:	0001602, 0005152, 0005178, 0005455
Asset Description:	WWTP PUMP STATIONS - HAMPTON, DOUGLASADLE, UPHAMBROOK, MCCLOY
Asset Location:	4 Different Locations Based on Location of Pump Station
PM Frequency:	Monthly

	PUMP #1	PUMP #2	PUMP #3			
DATE	0005133	0005134	N/A	Readings	Flow	NAME
9/1	13284.6	14211.3	N/A	156981311	75.149	FOX, WR, CL
9/2	13285.0	14211.6	N/A	157002908	21.597	FOX, WR, CL
9/3	13285.2	14212.0	-	157028560	25.592	SB, CB
9/4	13285.4	14212.2	-	157044142	15.692	SB, CB
9/5	13285.8	14212.5	-	157067927	23.785	SB, CB
9/6	13286.0	14213.7	-	157083754	15.827	SB, CB, SS
9/7	13286.2	14212.9	N/A	157101521	17.770	SB, CB, NA
9/8	13286.6	14213.2	N/A	157167423	67.899	SB, CB, NA
9/9	13286.9	14213.6	N/A	157146790	22.633	CB, SB, SB
9/10	13287.2	14213.9	N/A	157168364	21.574	CB
9/11	13287.4	14214.1	N/A	157186032	17.668	CB
9/12	13287.7	14214.4	N/A	157205643	19.611	CB
9/13	13288.3	14214.8	N/A	157224222	236.584	SB
9/14	13288.5	14215.0	-	157259889	17.642	SB, RP, AR
9/15	13288.7	14215.3	-	157279532	19.643	SB, RP, AR
9/16	13289.0	14215.7	-	157305053	25.521	SB, CB
9/17	13289.3	14215.9	-	157320431	15.578	SB, CB, SS
9/18	13289.5	14216.2	-	157340341	19.710	SB, CB, SS
9/19	13289.7	14216.4	-	157355757	15.614	SB, CB, SS
9/20	13290.0	14216.6	-	157377422	21.695	SB
9/21	13290.2	14217.0	-	157395368	17.716	MS, CL, DA
9/22	13291.5	14218.7	-	157499565	104.197	MS, PA, CL
9/23	13291.8	14219.0	-	157523278	23.713	CB, SG
9/24	13292.0	14219.3	-	157541068	17.790	CB, SG
9/25	13292.4	14219.5	-	157560649	19.581	CB, SG
9/26	13292.6	14219.7	N/A	157578221	17.910	SB
9/27	13292.8	14220.3	N/A	157598274	200.97	SB, SB
9/28	13293.0	14220.5	-	157616522	18.248	SB, SM, RP
9/29	13293.2	14220.8	-	157634235	17.713	SB, SM, RP
9/30	13293.5	14221.1	-	157657957	23.722	SB, CB

Signature:

Steve Blakely

Date:

9-30-13



City of Richmond
Department of Public Utilities - Wastewater Treatment Plant
NINE MINIMUM CONTROL'S REPORT

**HAMPTON PUMP STATION
MONTHLY PUMP READINGS**

WORK ORDER #

P225644

YEAR >

2012

CIRCLE THE MONTH: JAN FEB MAR APR MAY JUNE JULY AUG SEPT **OCT** NOV DEC

Asset PM Group Name: **WWTP STATIONS**

PM ID Number: **854**

Asset Numbers: **0001602, 0005152, 0005178, 0005455**

Asset Description: **WWTP PUMP STATIONS - HAMPTON, DOUGLASADLE, UPHAMBROOK, MCCLOY**

Asset Location: **4 Different Locations Based on Location of Pump Station**

PM Frequency: **Monthly**

	PUMP #1	PUMP #2	PUMP #3			
DATE	0005133	0005134	N/A	Readings	Flow	NAME
10-1	13293.7	14221.3	-	157671688	13,723	SB, CB
10-2	13293.9	14221.6	-	157689243	17,563	SB, CB
10-3	13297.5	14222.1	-	157716205	20,962	SB, CB
10-4	13302.0	14222.5	-	157724037	13,832	SB, CB
10-5	13308.4	14223.0	-	157741836	17,793	SB, CB
10-6	13313.1	14223.5	-	157759477	17,647	SB, CB
10-7	13319.7	14224.2	-	157783657	24,180	SB, CB
10-8	13325.1	14225.8	-	157838771	65,114	SB, CB
10-9	13330.8	14226.3	-	157857883	19,112	SB, CB
10-10	13335.2	14231.3	-	15812133	314,250	SB, CB
10-11	13336.7	14232.9	-	158225447	103,314	SB, CB
10-12	13336.9	14233.3	-	158297368	21,921	SB, CB
10-13	13337.1	14233.7	-	158319127	21,759	SB, CB
10-14	13337.5	14234.3	-	158353244	34,117	SB, CB
10-15	13337.8	14234.7	-	158378754	25,510	SB, CB
10-16	13337.9	14234.9	-	158390438	11,684	SB, CB
10-17	13338.2	14235.1	-	158408243	17,805	SB
10-18	13338.4	14235.4	-	158427412	19,169	SB
19	13344.7	14235.9	N/A	158446825	19,413	Fox, DA, RP
20	13351.6	14236.5	N/A	158469521	22,696	Fox, DA, RP
21	13359.5	14237.1	-	158493871	24,378	SB
22	13364.9	14237.6	-	158511547	17,648	SB
23	13370.0	14238.0	-	158525355	13,803	SB, CB
24	13376.4	14238.6	-	158548188	22,833	SB
25	13383.6	14239.2	-	158569035	20,847	SB
26	13385.6	14239.6	N/A	158583307	14,272	Fox, SM, CL
27	13392.2	14240.2	N/A	158602336	19,029	Fox, DA, CL
28	13399.3	14240.8	-	158621443	25,107	SB, CB
29	13403.2	14241.3	-	158644536	17,093	SB, CB
30	13408.4	14241.7	-	158658687	14,151	SB
31	13413.0	14242.2	-	158675780	17,093	SB, CB

Signature: Steven Blafny

Date: 10-31-13



City of Richmond
Department of Public Utilities - Wastewater Treatment Plant
NINE MINIMUM CONTROL'S REPORT

**HAMPTON PUMP STATION
MONTHLY PUMP READINGS**

WORK ORDER #

P225773

YEAR >

2013

CIRCLE THE MONTH: JAN FEB MAR APR MAY JUNE JULY AUG SEPT OCT **NOV** DEC

Asset PM Group Name:	WWTP STATIONS
PM ID Number:	854
Asset Numbers:	0001602, 0005152, 0005178, 0005455
Asset Description:	WWTP PUMP STATIONS - HAMPTON, DOUGLASADLE, UPHAMBROOK, MCCLOY
Asset Location:	4 Different Locations Based on Location of Pump Station
PM Frequency:	Monthly

	PUMP #1	PUMP #2	PUMP #3			
DATE	0005133	0005134	N/A	Readings	Flow	NAME
11-1	13420.2	14242.7	-	158693526	17,746	SB
11-2	13430.6	14243.2	-	158711026	17,500	SB, RP, SM
11-3	13437.1	14243.7	-	158729907	18,881	SB, SM, RP
11-4	13442.3	14244.4	-	158752095	22,191	SB
11-5	13447.1	14244.8	-	158767675	15,580	SB, CB
11-6	13453.8	14245.2	-	158782268	15,034	CB
11-7	13460.9	14245.8	-	158801522	18,813	CB
11-8	13464.6	14246.3	-	158820198	18,676	SB, CB
11-9	13471.6	14246.7	-	158833512	13,314	CB, WR, CL, TB
11-10	13476.7	14247.3	-	158853840	24,328	CB, WR, CL, TB
11-11	13481.7	14247.9	-	158877135	23,285	SB, CB
11-12	13486.6	14248.7	-	158905109	27,984	SB, CB
11-13	13489.3	14249.2	-	158921377	16,268	SB, CA
11-14	13495.5	14249.8	-	158941363	19,986	SB, CB
11-15	13500.1	14250.1	-	158954601	13,238	SB, CB
11-16	13506.2	14251.4	-	15899642	41,641	MS, MS, AR
11-17	13510.1	14251.8	-	159013287	19,664	MS, AR
11-18	13515.1	14252.6	-	159040703	27,410	SB, CB
11-19	13520.3	14253.1	-	159058351	17,648	CB, SB
11-20	13528.4	14253.6	-	159077814	19,463	SB, CB
11-21	13528.5	14254.1	-	159092226	14,442	CB
11-22	13532.4	14254.5	-	159107657	15,431	SB
11-23	13539.6	14255.0	-	159123536	15,829	CB, RP, PA
11-24	13545.2	14255.5	-	159142127	18,591	CB, RP, PA
11-25	13551.4	14256.1	-	159164557	22,1430	SB, CB
11-26	13557.7	14256.7	-	159184439	19,882	SB, CA
11-27	13563.9	14260.4	-	159381587	197,148	SB, RP
11-28	13568.9	14264.0	-	159436869	69,282	CB, RP, PA
11-29	13575.5	14264.6	-	159458197	21,328	SB, PA, RP
11-30	13580.5	14265.2	-	159477882	197,685	SB, CB, DT

Signature:

Steve Blafung

Date:

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City of Richmond
Department of Public Utilities - Wastewater Treatment Plant
NINE MINIMUM CONTROL'S REPORT

HAMPTON PUMP STATION
MONTHLY PUMP READINGS

WORK ORDER #

P225955

YEAR >

2013

CIRCLE THE MONTH: JAN FEB MAR APR MAY JUNE JULY AUG SEPT OCT NOV DEC

Asset PM Group Name: WWTP STATIONS

PM ID Number: 854

Asset Numbers: 0001602, 0005152, 0005178, 0005455

Asset Description: WWTP PUMP STATIONS - HAMPTON, DOUGLASADLE, UPHAMBROOK, MCCLOY

Asset Location: 4 Different Locations Based on Location of Pump Station

PM Frequency: Monthly

DATE	PUMP #1 0005133	PUMP #2 0005134	PUMP #3 N/A	Readings	Flow	NAME
12-1	13584.5	14265.7	-	159497167	19,385	SB, CB, DA
12-2	13596.4	14266.3	-	159517081	19,914	SB, CB
12-3	13596.4	14267.0	-	159526137	9,056	SB, CB
12-4	13602.4	14267.3	-	159553307	27,170	SB
12-5	13607.8	14267.8	-	159573738	28,431	SB
12-6	13613.4	14268.3	-	159591528	17,790	SB, CB
7	13618.3	14269.8	N/A	159643098	51,570	FOX, RP, SM
8	13626.2	14270.3	N/A	159661958	18,860	FOX, SM, RP
9	13632.5	14274.2	-	159796646	134,688	SB, CB
10	13641.2	14276.4	-	159873567	76,921	SB
11	13645.4	14277.0	-	159896624	23,057	SB
12	13651.0	14277.6	-	159916451	20,027	SB
13	13656.8	14278.3	-	159947251	30,000	CB, SB
14	13660.8	14278.9	N/A	159961752	19,500	SB, CB, V
15	13667.3	14282.7	N/A	160094467	15,500	SB, CB, V
16	13674.2	14283.3	-	160115566	21,099	SB, CB
17	13680.1	14284.1	-	160143896	28,280	SB, CB
18	13687.5	14286.1	-	160215126	11,280	SB, CB
19	13693.1	14286.7	-	160235928	20,864	SB
20	13699.4	14287.4	-	160258908	22,913	CB
21	13703.8	14287.8	-	160274416	23,487	CB, MS, SB, AR
22	13709.8	14288.4	-	160292288	18,538	SB, MS, AR
23	13718.1	14291.8	-	160414492	121,538	SB, CB, AR
24	13724.4	14292.9	-	160455341	40,849	SB, CB, AR
25	13729.4	14293.5	-	160478329	22,988	SB, CB, AR
26	13735.3	14294.2	-	160501411	23,082	SB, CB
27	13740.7	14294.6	-	160518668	17,249	SB, CB
28	13747.6	14295.3	-	160542854	24,194	CB, RP, DA
29	13753.1	14297.0	-	160600050	51,146	CB, RP, DA
30	13761.8	14301.3	-	160749173	149,123	SB, CB
31	13765.1	14301.9	-	160768214	19,041	SB, CB

Signature: Steve Blokey

Date: 12-31-13



City of Richmond
Department of Public Utilities - Wastewater Treatment Plant
NINE MINIMUM CONTROL'S REPORT

UPHAMBROOK STATION
MONTHLY PUMP READINGS

WORK ORDER #

P223597

YEAR >

2013

CIRCLE THE MONTH: JAN FEB MAR APR MAY JUNE JULY AUG SEPT OCT NOV DEC

Asset PM Group Name: WWTP STATIONS

PM ID Number: 854

Asset Numbers: 0001602, 0005152, 0005178, 0005455

Asset Description: WWTP PUMP STATIONS - HAMPTON, DOUGLASADLE, UPHAMBROOK, MCCLOY

Asset Location: 4 Different Locations Based on Location of Pump Station

PM Frequency: Monthly

DATE	PUMP #1 0005179	PUMP #2 0005180	PUMP #3 0005181	NAME
1-1-13	1764.5	2163.0	3833.6	CP, SPH
1-2-13	1764.5	2164.3	3833.6	LM, MS, SB
1-3-13	1764.5	2165.7	3833.6	LM, MS
1-4-13	1764.5	2167.2	3833.6	SB, LM, MS
1-5-13	1764.5	2168.5	3833.6	FOX, RP, SS
1-6-13	1764.5	2169.8	3833.6	FOX, RP, SS
1-7-13	1764.5	2171.2	3833.6	SB, LM, MS
1-8-13	1764.5	2172.5	3833.6	SB, LM, MS
1-9-13	1764.5	2173.7	3833.6	LM
1-10-13	1764.5	2174.5	3833.6	SB, LM, MS
1-11-13	1764.5	2176.3	3833.6	SB, LM, MS
1-12-13	1764.5	2178.5	3833.6	SB, DA, RP
1-13-13	1764.5	2178.7	3833.6	SB, DA, RP
1-14-13	1764.5	2179.9	3833.6	SB, LM, MS
1-15-13	1764.5	2182.0	3833.6	SB, LM, MS
1-16-13	1764.5	2186.3	3833.6	SB, LM, MS
1-17-13	1764.5	2191.6	3833.6	SB, LM, MS
1-18-13	1764.6	2199.3	3833.6	LM, MS, SB
1-19-13	1764.6	2204.6	3833.6	MS, PA, RP
1-20-13	1764.6	2209.9	3833.6	MS, PA, RP
1-21-13	1764.6	2213.9	3833.6	MS, RP, DA
1-22-13	1764.6	2218.2	3833.6	LM, SB
1-23-13	1764.6	2221.8	3833.6	LM, MS, SB
1-24-13	1764.6	2225.5	3833.6	LM, MC
1-25-13	1764.6	2227.8	3833.6	LM, SB, MS
1-26-13	1764.6	2230.7	3833.6	MS, MS, SM
1-27-13	1764.6	2233.1	3833.6	MS, MS, SM
1-28-13	1764.6	2235.6	3833.6	SB, LM, MS
1-29-13	1764.6	2238.0	3833.6	SB, LM, MS
1-30-13	1766.2	2238.4	3833.7	SB, LM, MS
1-31-13	1766.2	2238.4	3837.3	SB, LM, MS

Signature:

Date: 1-30-13



City of Richmond
Department of Public Utilities - Wastewater Treatment Plant
NINE MINIMUM CONTROL'S REPORT

**UPHAMBROOK STATION
MONTHLY PUMP READINGS**

WORK ORDER #

0823738

YEAR >

2013

CIRCLE THE MONTH: JAN **FEB** MAR APR MAY JUNE JULY AUG SEPT OCT NOV DEC

Asset PM Group Name:	WWTP STATIONS
PM ID Number:	854
Asset Numbers:	0001602, 0005152, 0005178, 0005456
Asset Description:	WWTP PUMP STATIONS - HAMPTON, DOUGLASADLE, UPHAMBROOK, MCCLOY
Asset Location:	4 Different Locations Based on Location of Pump Station
PM Frequency:	Monthly

DATE	PUMP #1	PUMP #2	PUMP #3	NAME
	0005178	0005180	0005181	
2-1-13	1766.2	2238.4	3840.5	SB, LM, MS
2-2-13	1766.2	2238.4	3843.1	CB, SS, WR
2-3-13	1766.2	2238.4	3845.7	CB, SS, WR
2-4-13	1766.2	2238.4	3848.2	SB, LM, MS
2-5-13	1766.2	2238.4	3850.6	LM, MS
2-6-13	1766.2	2238.4	3852.9	SB, LM, MS
2-7-13	1766.2	2238.4	3855.2	MS, LM, SB
2-8-13	1766.2	2238.4	3858.7	SB, LM, MS
2-9-13	1766.2	2238.4	3862.4	CB, SB, AR
2-10-13	1766.2	2238.4	3865.6	SB, CB, AR
2-11-13	1766.2	2238.4	3868.5	SB, LM, MS
2-12-13	1766.2	2238.4	3871.7	LM, MS
2-13-13	1766.2	2238.4	3874.0	SB, LM
2-14-13	1766.2	2238.4	3876.7	SB, LM
2-15-13	1766.2	2238.4	3878.9	SB, MS
2-16-13	1766.2	2238.4	3881.2	SB, SS, DA
2-17-13	1766.2	2238.4	3883.6	SB, SS, DA
2-18-13	1766.2	2238.4	3885.7	SB, SS, DA
2-19-13	1768.1	2238.4	3885.9	SB, LM, MS
2-20-13	1768.2	2238.4	3888.1	SB, LM, MS
2-21-13	1768.2	2238.4	3890.2	SB, LM
2-22-13	1768.2	2238.4	3892.3	SB, LM
2-23-13	1768.2	2238.4	3894.4	CB, RP, PA
2-24-13	1768.2	2238.4	3896.5	CB, RP, PA
2-25-13	1768.2	2238.4	3898.5	SB, LM, MS
2-26-13	1768.2	2238.4	3900.4	LM, MS, SB
2-27-13	1768.2	2238.4	3903.9	SB, LM, MS
2-28-13	1768.2	2238.4	3906.8	SB, LM

Signature: B. Kelley

Date: 2 28 13



City of Richmond
Department of Public Utilities - Wastewater Treatment Plant
NINE MINIMUM CONTROL'S REPORT

UPHAMBROOK STATION
MONTHLY PUMP READINGS

WORK ORDER #

P224108

YEAR >

2013

CIRCLE THE MONTH: JAN FEB MAR APR MAY JUNE JULY AUG SEPT OCT NOV DEC

Asset PM Group Name: WWTP STATIONS

PM ID Number: 054

Asset Numbers: 0001602, 0005152, 0005178, 0005455

Asset Description: WWTP PUMP STATIONS - HAMPTON, DOUGLASADLE, UPHAMBROOK, MCCLOY

Asset Location: 4 Different Locations Based on Location of Pump Station

PM Frequency: Monthly

DATE	PUMP #1 0005179	PUMP #2 0005180	PUMP #3 0005181	NAME
3-1-13	1768.2	2238.5	3909.6	LM, MS, SB
3-2-13	1768.2	2238.5	3911.7	SB, SM, RP
3-3-13	1768.2	2238.5	3914.1	SB, SM, RP
3-4-13	1768.2	2238.5	3916.3	SB, LM, MS
3-5-13	1768.2	2238.5	3919.1	SB, LM, MS
3-6-13	1768.2	2238.8	3923.3	SB, LM, MS
3-7-13	1768.2	2240.8	3943.4	SB, LM, MS
3-8-13	1768.2	2240.8	3955.1	SB, LM, MS
3-9-13	HOURS METER, INOPERABLE	2240.8	3961.8	MS.
3-10-13	HOURS METER, INOPERABLE	2240.9	3967.2	MS
3-11-13	O/S	2240.8	3972.3	SB
3-12-13	O/S	2240.8	3976.3	SB
3-13-13	O/S	2240.8	3981.3	SB
3-14-13	O/S	2240.8	3985.5	SB
3-15-13	O/S	2240.8	3989.2	SB
3-16-13	O/S	2240.8	3992.9	MS, MS, AR
3-17-13	O/S	2240.8	3996.7	MS, MS, AR
3-18-13	O/S	2240.8	4003.6	SB
3-19-13	O/S	2240.8	4009.2	SB, MS
3-20-13	O/S	2240.8	4015.6	SB
3-21-13	O/S	2240.9	4019.5	LM, MS
3-22-13	O/S	2240.9	4024.6	SB
3-23-13	O/S	2240.9	4027.9	SB, DA, RP
3-24-13	O/S	2240.9	4031.2	SB, DA, RP
3-25-13	O/S	2240.9	4035.9	SB
3-26-13	O/S	2240.9	4040.8	SB
3-27-13	O/S	2240.9	4045.3	LM, MS
3-28-13	O/S	2240.9	4049.4	SB, LM, MS
3-29-13	O/S	2240.9	4052.5	SB, CB, KA, RP
3-30-13	O/S	2240.9	4055.6	SB, CB, KA
3-31-13	O/S	2240.9	4058.9	SB, CB, KA

Signature: B. Bradley

Date: 4/2/13



City of Richmond
Department of Public Utilities - Wastewater Treatment Plant
NINE MINIMUM CONTROL'S REPORT

UPHAMBROOK STATION
MONTHLY PUMP READINGS

WORK ORDER #

YEAR > 2013

CIRCLE THE MONTH: JAN FEB MAR APR MAY JUNE JULY AUG SEPT OCT NOV DEC

Asset PM Group Name:	WWTP STATIONS
PM ID Number:	854
Asset Numbers:	0001602, 0005152, 0005178, 0005455
Asset Description:	WWTP PUMP STATIONS - HAMPTON, DOUGLASADLE, UPHAMBROOK, MCCLOY
Asset Location:	4 Different Locations Based on Location of Pump Station
PM Frequency:	Monthly

DATE	PUMP #1	PUMP #2	PUMP #3	NAME
	0005179	0005180	0005181	
4-1	0/S	2240.9	4062.2	SB
4-2	0/S	2240.9	4065.5	SB
4/3/13	0/S	2240.9	4067.2	MS, LM
4-4-13	0/S	2240.9	4069.8	LM MS
4-5-13	0/S	2240.9	4073.9	SB, LM
4-6-13	0/S	2240.9	4077.6	FOX STAGE, PEGAS
4-7-13	0/S	2240.9	4080.8	FOX STAGE, PEGAS
4-8-13	0/S	2240.9	4083.8	LM MS
4-9-13	0/S	2240.9	4087.0	MS LM
4-10-13	0/S	2240.9	4090.3	LM MS
4-11-13	0/S	2241.0	4092.2	SB
4-12-13	0/S	2241.0	4098.4	SB
4-13-13	0/S	2241.0	4101.4	SB, CB, WR
4-14-13	0/S	2241.0	4104.9	SB, CB, WR
4-15-13	0/S	2241.0	4108.0	SB
4-16-13	0/S	2241.0	4110.8	LM SB
4-17-13	0/S	2241.0	4113.5	SB, LM, MS
4-18-13	1770.1	2241.0	4116.0	LM SB MS
4-19-13	1770.1	2241.0	4118.8	SB, LM, MS
4-20-13	1770.1	2241.0	4121.6	SB, CB, AR
4-21-13	1770.1	2241.0	4124.4	SB, CB, AR
4-22-13	1770.1	2241.0	4127.0	SB MS LA
4-23	1770.1	2241.0	4129.8	SB, LM, MS
4-24	1770.1	2241.0	4132.1	SB, LM, MS
4-25	1770.1	2241.0	4134.5	SB
4-26	1770.1	2241.0	4137.2	SB
4/27/13	1770.1	2241.0	4138.7	MS, RP, DA
4/28/13	1770.1	2241.0	4140.7	MS, RP, DA
4-29	1770.1	2241.0	4143.2	SB, LM, MS
4-30	1770.1	2241.0	4145.9	SB

Signature: B. Buckley

Date: 5-1-13



City of Richmond
Department of Public Utilities - Wastewater Treatment Plant
NINE MINIMUM CONTROL'S REPORT

UPHAMBROOK STATION
MONTHLY PUMP READINGS

WORK ORDER #

8224365

YEAR >

2013

CIRCLE THE MONTH: JAN FEB MAR APR MAY JUNE JULY AUG SEPT OCT NOV DEC

Asset PM Group Name: WWTP STATIONS

PM ID Number: 854

Asset Numbers: 0001602, 0005152, 0005178, 0005455

Asset Description: WWTP PUMP STATIONS - HAMPTON, DOUGLASADLE, UPHAMBROOK, MCCLOY

Asset Location: 4 Different Locations Based on Location of Pump Station

PM Frequency: Monthly

DATE	PUMP #1 0005179	PUMP #2 0006180	PUMP #3 0005181	NAME
5-1-13	1770.1	2241.0	4148.3	SB
5-2	1770.1	2241.0	4150.5	SB, LM, MS
5-3	1770.1	2241.0	4152.5	SB, LM, MS
5-4	1770.1	2241.0	4154.5	CB, CL, SM
5-5	1770.1	2241.0	4156.4	CB, CL, SM
5/6/13	1770.1	2241.1	4158.2	LM, MS, CB
5-7-13	1770.1	2241.1	4160.6	LM MS
5-8-13	1770.5	2241.1	4169.7	LM SB
5/9/13	1770.6	2241.1	4174.5	LM, MS
5-10-13	1770.5	2241.1	4177.4	LM MS
5-11-13	1770.6	2241.1	4180.2	MS, RP, DA
5-12-13	1770.6	2241.1	4183.1	MS, RP, DA
5-13-13	1770.6	2241.1	4185.8	LM MS SB
5-14-13	1770.6	2241.1	4188.1	LM MS
5-15	1770.6	2241.1	4190.5	SB
5-16-13	1770.6	2241.1	4192.8	LM SB MS
5-17	1770.6	2241.1	4195.0	SB, LM
5-18	1770.6	2241.1	4197.5	SB, CL
5-19	1770.6	2241.1	4200.2	SB, CL
5-20-13	1770.6	2241.1	4202.9	LM SB
5-21-13	1770.6	2241.1	4206.1	LM SB
5-22-13	1770.6	2241.1	4207.4	LM SB
5-23	1770.6	2241.1	4210.2	SB, LM
5-24	1770.6	2241.1	4212.1	SB, LM
5-25	1770.6	2241.1	4214.0	FOX, CB, AR
5-26	1770.6	2241.1	4218.9	FOX, CB, AR
5-27	1770.6	2241.1	4217.6	FOX, CB, AR
5-28	1770.6	2241.1	4219.5	SB, LM, MS
5-29	1770.6	2241.2	4221.3	SB MS LM
5-30/13	1770.6	2241.2	4223.5	LM MS SB
5-31-13	1770.6	2241.2	4225.4	LM SB M2

Signature: [Signature]

Date: 6-4-13



City of Richmond
Department of Public Utilities - Wastewater Treatment Plant
NINE MINIMUM CONTROL'S REPORT

UPHAMBROOK STATION
MONTHLY PUMP READINGS

WORK ORDER #

P224637

YEAR >

2013

CIRCLE THE MONTH: JAN FEB MAR APR MAY JUN JULY AUG SEPT OCT NOV DEC

Asset PM Group Name: WWTP STATIONS

PM ID Number: 854

Asset Numbers: 0001602, 0005152, 0005178, 0005455

Asset Description: WWTP PUMP STATIONS - HAMPTON, DOUGLASADLE, UPHAMBROOK, MCCLOY

Asset Location: 4 Different Locations Based on Location of Pump Station

PM Frequency: Monthly

DATE	PUMP #1	PUMP #2	PUMP #3	NAME
	0005179	0005180	0005181	
6-1	1770.6	2241.2	4227.3	Fox, PA, RP
2	1770.6	2241.2	4229.0	Fox, PA, RP
3	1770.6	2241.2	4231.2	SB, LM, MS
4	1770.6	2241.2	4233.8	SB, LM, MS
5	1770.6	2241.2	4234.8	SB, LM, MS
6	1770.6	2241.2	4236.7	LM, SB
7	1770.6	2241.2	4238.7	SB, LM, MS
8	1770.6	2241.2	4249.8	SB, KA, CL
9	1770.6	2241.2	4256.1	SB, KA, CL
10	1771.2	2241.2	4259.7	SB, LM, MS
11	1771.2	2241.2	4267.4	SB, LM
12	1771.2	2241.2	4272.5	LM, SB, MS
13	1771.2	2241.2	4276.3	LM, SB, MS
14	1771.2	2241.2	4280.6	SB, LM, MS
6/15/13	1771.2	2241.2	4283.6	MS, SM, RP
6/16/13	1771.2	2241.2	4286.4	MS, RP, SM
6-17-13	1771.2	2241.2	4289.9	LM, MS, SB
6-18	1771.2	2241.2	4291.8	SB, LM, MS
6-19-13	1771.6	2241.2	4300.4	LM, MS, SB
6-20	1771.6	2241.2	4305.2	SB, LM, MS
6-21	1771.6	2241.2	4309.1	SB, LM, MS
6-22	1771.6	2241.2	4312.0	MS, CL, WR
6-23	1771.6	2241.2	4315.0	MS, CL, WR
6-24-13	1771.6	2241.2	4318.1	LM
6-25-13	1771.6	2241.2	4320.7	SB, LM, MS
6-26-13	1771.6	2241.2	4323.4	LM, MS, SB
6-27	1771.6	2241.2	4325.8	SB, LM, MS
6-28	1771.6	2241.2	4328.2	SB, LM, MS
6-29	1771.6	2241.2	4330.6	CB, SB, AR
6-30	1771.6	2241.2	4332.7	CB, SB, AR

Signature: B. B. B. B.

Date: 6 30 13



City of Richmond
Department of Public Utilities - Wastewater Treatment Plant
NINE MINIMUM CONTROL'S REPORT

UPHAMBROOK STATION
MONTHLY PUMP READINGS

WORK ORDER #

P224813

YEAR >

2013

CIRCLE THE MONTH: JAN FEB MAR APR MAY JUNE JULY AUG SEPT OCT NOV DEC

Asset PM Group Name: WWTP STATIONS

PM ID Number: 854

Asset Numbers: 0001602, 0005152, 0005178, 0005455

Asset Description: WWTP PUMP STATIONS - HAMPTON, DOUGLASADLE, UPHAMBROOK, MCCLOY

Asset Location: 4 Different Locations Based on Location of Pump Station

PM Frequency: Monthly

DATE	PUMP #1 0005179	PUMP #2 0005180	PUMP #3 0005181	NAME
7-1-13	1771.6	2241.2	4395.2	LM, SB, SC
7-2-13	1771.6	2241.2	4338.7	SB, LM, SC
7-3-13	1771.6	2241.2	4342.2	SB, LM, SC
7-4	1771.6	2241.2	4346.8	SB, CA
7-5-13	1771.7	2241.2	4350.3	SB, LM, SC
7-6	1772.3	2241.2	4352.3	SB, KA, RP
7-7	1772.3	2241.2	4354.8	SB, KA, RP
7-8	1772.4	2241.2	4357.4	SB, LM, SC
7-9	1772.4	2241.2	4359.7	SB, LM, SS
7-10	1772.4	2241.2	4362.1	SB, LM, SG
7-11	1772.4	2241.2	4365.4	SB, LM, SG
7-12	1772.4	2241.2	4369.4	SB, LM, SG
7-13	1772.4	2241.2	4371.7	FOX, DA, CL
7-14	1772.4	2241.2	4374.3	FOX, DA, CL
7-15	1772.4	2241.2	4376.6	SB, LM, SG
7-16	1772.4	2241.2	4379.0	SB, SG
7-17	1772.4	2241.2	4381.4	SB, LM, SG
7-18	1772.4	2241.2	4383.3	SB, LM, SG
7-19	1772.4	2241.2	4385.5	SB, LM, SG
7-20	1772.4	2241.2	4387.5	CB, RP, SM
7-21	1772.4	2241.2	4389.4	SB, SM, RP
7-22	1773.2	2243.1	4396.6	SB, LM
7-23	1775.2	2243.1	4400.0	SB, LM, SG
7-24	1775.8	2243.1	4401.9	SB
7-25	1775.8	2243.1	4404.5	SB
7-26	1775.8	2243.1	4407.0	SB, LM, SS
7-27	1775.8	2243.1	4409.0	SB, WR, CL
7-28	1775.8	2243.1	4411.0	SB, WR, CL
7-29	1775.8	2243.1	4412.9	SB, LM, SS
7-30	1775.8	2243.1	4415.4	SB, LM, SS
7-31	1775.8	2243.1	4416.7	SB, SS

Signature: B. Berthel

Date: August 1st 13



City of Richmond
Department of Public Utilities - Wastewater Treatment Plant
NINE MINIMUM CONTROL'S REPORT

UPHAMBROOK STATION
MONTHLY PUMP READINGS

WORK ORDER #

YEAR >

2013

CIRCLE THE MONTH: JAN FEB MAR APR MAY JUNE JULY AUG SEPT OCT NOV DEC

Asset PM Group Name: WWTP STATIONS

PM ID Number: 854

Asset Numbers: 0001602, 0005152, 0005178, 0005455

Asset Description: WWTP PUMP STATIONS - HAMPTON, DOUGLASADLE, UPHAMBROOK, MCCLOY

Asset Location: 4 Different Locations Based on Location of Pump Station

PM Frequency: Monthly

	PUMP #1	PUMP #2	PUMP #3	NAME
DATE	0005179	0005180	0005181	
8-1	1775.8	2243.1	4420.6	SB, SB
8-2	1776.5	2243.1	4426.6	SB, Sg
8-3-13	1776.5	2243.1	4429.6	ms, AR, RP
8/4/13	1776.5	2243.1	4432.4	ms, AR, RP
8-5	1776.5	2243.1	4434.7	SB, Sg
8-6	1776.5	2243.1	4437.2	SB, Sg
8-7	1776.5	2243.1	4440.5	SB, Sg
8-8	1776.5	2243.1	4442.9	SB
8-10	1776.5	2243.1	4447.3	OB RP DA
8-11	1776.5	2243.1	4445.2	OB RP DA
8-12	1776.5	2243.1	4454.5	SB, CB
8-13	1776.5	2243.1	4456.7	SB, Sg, CB
8-14	1776.5	2243.1	4459.1	SB, Sg, CB
8-15	1776.5	2243.1	4461.9	SB, Sg, CB
8-16	1776.5	2243.1	4462.9	SB, Sg, CB
8-17	1776.5	2243.1	4464.7	SB, B, A, CL
8-18	1776.5	2243.1	4466.9	SB, A, CL
8-19	1776.6	2243.1	4470.3	SB, Sg, CB
8-20	1776.6	2243.1	4472.1	SB, Sg, CB
8-21	1776.6	2243.1	4474.2	SB, Sg, CB
8-22	1776.6	2243.2	4476.2	SB, Sg, CB
8-23	1776.6	2243.2	4478.2	SB, Sg, CB
8-24	1776.6	2243.2	4483.7	SB, Sm, RP
8-25	1776.6	2243.2	4486.7	SB, Sm, RP
8-26	1776.6	2243.2	4489.4	SB, Sg, CB
8-27	1776.6	2243.3	4492.0	CB
8-28	1776.6	2243.3	4494.2	SB, Sg, CB
8-29	1776.6	2243.3	4497.6	SB, B, B
8-30	1777.6	2243.3	4500.0	SG, CP
8-31	1776.6	2243.3	4501.8	FOX, NR, CL

Signature: Steven Blufkens

Date: 9 3 13



City of Richmond
Department of Public Utilities - Wastewater Treatment Plant
NINE MINIMUM CONTROL'S REPORT

UPHAMBROOK STATION
MONTHLY PUMP READINGS

WORK ORDER #

P225287

YEAR >

2013

CIRCLE THE MONTH: JAN FEB MAR APR MAY JUNE JULY AUG (SEPT) OCT NOV DEC

Asset PM Group Name: WWTP STATIONS

PM ID Number: 854

Asset Numbers: 0001602, 0005152, 0005178, 0005455

Asset Description: WWTP PUMP STATIONS - HAMPTON, DOUGLASADLE, UPHAMBROOK, MCCLOY

Asset Location: 4 Different Locations Based on Location of Pump Station

PM Frequency: Monthly

DATE	PUMP #1 0005179	PUMP #2 0005180	PUMP #3 0005181	NAME
1	1776.7	2243.3	4503.7	FOX, NR, CL
2	1776.7	2243.3	4505.6	FOX, NR, CL
3	1776.7	2243.3	4507.7	SB, CB
4	1776.7	2243.3	4509.4	SB, CB
5	1776.7	2243.3	4511.3	SB
6	1776.7	2243.3	4513.1	SB, CB, SS
7	1776.7	2243.4	4514.9	SB, CB, RP
8	1776.7	2243.4	4516.6	SB, CB, RP
9	1776.7	2243.4	4518.5	CB
10	1776.7	2243.4	4520.2	CB
11	1776.7	2243.4	4522.0	CB
12	1776.7	2243.4	4523.7	CB
13	1776.7	2243.4	4525.7	SB, SS
14	1776.7	2243.4	4527.2	SB, RP, AP
15	1776.7	2243.4	4528.7	SB, RP, AP
16	1776.7	2243.4	4530.2	SB, CB
17	1776.7	2243.4	4532.0	SB, CB, SS
18	1776.7	2243.4	4533.3	SB, CB, SS
19	1776.7	2243.4	4534.8	SB, CB
20	1776.7	2243.4	4536.4	SB
9/21/13	1776.7	2243.4	4537.7	MS, MS, CL
9/22/13	1776.7	2243.4	4540.0	MS, PA, CL
9/23/13	1776.7	2243.4	4541.8	CB, SB
9/24/13	1776.8	2243.4	4543.6	CB, SB
9/25/13	1776.8	2243.4	4545.1	CB, SB
9-26-13	1776.7	2243.4	4546.7	SB
9-26-13	1776.8	2243.4	4548.9	SB
9-27	1776.8	2243.4	4549.7	SB, SS, RP
9-28	1776.8	2243.4	4549.7	SB, SS, RP
9-29	1776.8	2243.4	4551.1	SB, RP, SS
9-30	1776.8	2243.4	4552.4	SB, CB

Signature:

Steve Blakely

Date:

9-30-13



City of Richmond
Department of Public Utilities - Wastewater Treatment Plant
NINE MINIMUM CONTROL'S REPORT

**UPHAMBROOK STATION
MONTHLY PUMP READINGS**

WORK ORDER #

P223644

YEAR >

2013

CIRCLE THE MONTH: JAN FEB MAR APR MAY JUNE JULY AUG SEPT 09 NOV DEC

Asset PM Group Name: WWTP STATIONS

PM ID Number: 854

Asset Numbers: 0001602, 0005152, 0005178, 0005455

Asset Description: WWTP PUMP STATIONS - HAMPTON, DOUGLASADLE, UPHAMBROOK, MCCLOY

Asset Location: 4 Different Locations Based on Location of Pump Station

PM Frequency: Monthly

DATE	PUMP #1 0005179	PUMP #2 0005180	PUMP #3 0005181	NAME
10-1	1776.8	2243.4	4554.2	SB, CB
10-2	1776.8	2243.4	4556.1	SB, CB
10-3	1776.8	2243.4	4557.3	SB, CB
10-4	1776.8	2243.4	4558.6	SB, CB
10-5	1776.8	2242.4	4560.2	SB, CB
10-6	1776.8	2243.4	4561.4	SB, CB
10-7	1776.8	2243.4	4563.0	SB, CB
10-8	1776.8	2243.4	4564.9	SB, CB
10-9	1776.8	2243.4	4566.3	SB, CB
10-10	1776.9	2243.5	4572.4	SB, CB
10-11	1776.9	2243.5	4577.3	SB, CB, SS
10-12	1776.9	2243.5	4580.3	SB, CB, ST
10-13	1776.9	2243.5	4582.4	SB, CB
10-14	1776.9	2243.5	4585.1	SB, CB
10-15	1776.9	2243.5	4587.9	SB, CB
10-16	1776.9	2243.5	4589.4	SB, CB
10-17	1776.9	2243.5	4591.7	SB
10-18	1776.9	2243.5	4593.9	SB
19	1776.9	2243.5	4596.0	FOX, DA, RP
20	1776.9	2243.5	4597.5	FOX, DA, RP
21	1776.9	2243.5	4599.2	SB
22	1776.9	2243.5	4601.9	SB
23	1776.9	2243.5	4602.7	SB, CB
24	1776.9	2243.5	4604.5	SB
25	1776.9	2243.5	4605.9	SB
26	1776.9	2243.5	4607.6	FOX, SM, CL
27	1776.9	2243.5	4609.1	FOX, DA, CL
28	1776.9	2243.5	4610.6	SB, CB
29	1776.9	2243.5	4612.3	SB, CB
30	1776.9	2243.5	4614.2	SB
31	1776.9	2243.5	4615.8	SB, CB

Signature: Steven Blakeney

Date: 10-31-13



City of Richmond
Department of Public Utilities - Wastewater Treatment Plant
NINE MINIMUM CONTROL'S REPORT

UPHAMBROOK STATION
MONTHLY PUMP READINGS

WORK ORDER #

225773

YEAR >

2013

CIRCLE THE MONTH: JAN FEB MAR APR MAY JUNE JULY AUG SEPT OCT **NOV** DEC

Asset PM Group Name: WWTP STATIONS

PM ID Number: 854

Asset Numbers: 0001602, 0005152, 0005178, 0005455

Asset Description: WWTP PUMP STATIONS - HAMPTON, DOUGLASADLE, UPHAMBROOK, MCCLOY

Asset Location: 4 Different Locations Based on Location of Pump Station

PM Frequency: Monthly

DATE	PUMP #1 0005179	PUMP #2 0005180	PUMP #3 0005181	NAME
11-1	1776.9	2243.5	4617.0	SB
11-2	1776.9	2243.5	4618.5	SB, RP, SM
11-3	1776.9	2243.5	4619.8	SB, SM, RP
11-4	1776.9	2243.5	4621.7	SB
11-5	1776.9	2243.5	4622.7	SB, CB
11-6	1777.0	2243.5	4624.1	CB, SB
11-7	1777.0	2243.5	4625.7	CB
11-8	1777.0	2243.5	4627.0	SB, CA
11-9	1777.0	2243.5	4628.4	CB, CL, WR, TB
11-10	1777.0	2243.5	4629.7	CB, CL, WR, TB
11-11	1777.0	2243.5	4631.5	SB, CB
11-12	1777.0	2243.5	4632.6	SB, CB
11-13	1777.0	2243.5	4634.0	SB, CB
11-14	1777.0	2243.5	4635.8	SB, CB
11-15	1777.0	2243.5	4636.9	SB, CB
11-16	1777.1	2243.5	4638.1	MS, AR
11-17	1777.1	2243.5	4638.2	MS, AR
11-18	1777.1	2243.5	4641.1	SB, CB
11-19	1777.1	2243.5	4642.6	CB, SG
11-20	1777.1	2243.5	4644.0	SB, CB
11-21	1777.1	2243.5	4645.4	CB
11-22	1777.1	2243.5	4647.3	SB, CB
11-23	1777.1	2243.5	4648.2	CB, RP, PA
11-24	1777.1	2243.5	4649.8	CB, RP, PA
11-25	1777.1	2243.5	4651.2	SB
11-26	1777.1	2243.5	4652.7	SB, CB
11-27	1780.4	2243.7	4653.7	SB, RP
11-28	1780.9	2243.7	4659.1	SB, RP, PA
11-29	1780.9	2243.7	4661.1	SB, CB, DA
11-30	1782.0	2243.7	4662.8	SB, CB, DA

Signature:

Steve Blakely

Date:

Dec 2 13



City of Richmond
Department of Public Utilities - Wastewater Treatment Plant
NINE MINIMUM CONTROL'S REPORT

UPHAMBROOK STATION
MONTHLY PUMP READINGS

WORK ORDER #

P225955

YEAR >

2013

CIRCLE THE MONTH: JAN FEB MAR APR MAY JUNE JULY AUG SEPT OCT NOV DEC

Asset PM Group Name: **WWTP STATIONS**

PM ID Number: **854**

Asset Numbers: **0001602, 0005152, 0005178, 0005455**

Asset Description: **WWTP PUMP STATIONS - HAMPTON, DOUGLASADLE, UPHAMBROOK, MCCLOY**

Asset Location: **4 Different Locations Based on Location of Pump Station**

PM Frequency: **Monthly**

DATE	PUMP #1	PUMP #2	PUMP #3	NAME
	0005179	0005180	0005181	
12-1	1780.9	2243.7	4662.9	SB, CB, DA
12-2	1780.9	2243.7	4665.0	SB, CB
12-3	1780.9	2243.7	4666.5	SB, CB
12-4	1780.9	2243.7	4668.9	SB
12-5	1780.9	2243.7	4670.1	SB
12-6	1780.9	2243.8	4672.2	SB
7	1781.0	2243.8	4673.8	FOX, SM, RP
8	1781.0	2243.8	4675.5	FOX, SM, RP
9	1781.0	2243.8	4680.7	SB, CB
10	1781.0	2243.8	4685.9	SB
11	1781.0	2243.8	4688.5	SB
12	1781.0	2243.8	4691.5	SB, CB
13	1781.0	2243.8	4694.3	SB, CB
14	1781.0	2243.8	4695.9	SB, CA, 2
15	1781.0	2243.8	4702.0	SB, CB, 2
16	1781.0	2243.8	4706.5	SB, CB
17	1781.0	2243.8	4709.8	SB, CB
18	1781.0	2243.8	4714.2	SB, CB
19	1781.0	2243.8	4717.1	SB, CB
20	1781.0	2243.8	4720.3	CB, SB
21	1781.0	2243.8	4723.2	CB, AR, SB, MS
22	1781.0	2243.8	4726.1	SB, MS, AR
23	1781.0	2243.8	4731.7	SB, CB, AR
24	1781.0	2243.8	4736.8	SB, CA, AR
25	1781.0	2243.8	4741.7	SB, CB, AR
26	1781.1	2243.8	4745.8	CB, SB
27	1781.1	2243.8	4748.9	SB, CB
28	1781.1	2243.8	4752.1	CB, DA, RP
29	1781.1	2243.8	4758.1	CB, DA, RP
30	1781.1	2244.5	4767.7	CB, SB
31	1781.1	2244.5	4772.4	SB, CB

Signature: Steve Blakney

Date: 12-31-13



City of Richmond
Department of Public Utilities - Wastewater Treatment Plant
NINE MINIMUM CONTROL'S REPORT

MCCLOY PUMP STATION
MONTHLY PUMP READINGS

WORK ORDER #

8723597

YEAR >

2013

CIRCLE THE MONTH: JAN FEB MAR APR MAY JUNE JULY AUG SEPT OCT NOV DEC

Asset PM Group Name: WWTP STATIONS

PM ID Number: 854

Asset Numbers: 0001602, 0005152, 0005178, 0005455

Asset Description: WWTP PUMP STATIONS - HAMPTON, DOUGLASADLE, UPHAMBROOK, MCCLOY

Asset Location: 4 Different Locations Based on Location of Pump Station

PM Frequency: Monthly

DATE	PUMP #1 0005933	PUMP #2 0005934	PUMP #3 N/A	Wetwell	Tunnel	NAME
1-1-13	70.3	183.7	N/A	12.7	13.0	OB, SM
1-2-13	24.0	183.7	N/A	12.9	13.2	LM, MS, SB
1-3-13	25.8	185.7	N/A	12.8	13.1	LM, MS
1-4-13	77.4	187.8	-	12.2	12.6	SB, LM, MS
1-5-13	28.4	188.8	N/A	12.5	12.8	FOX, AR, SS
1-6-13	29.2	189.7	N/A	12.7	13.0	FOX, AR, SS
1-7-13	80.0	190.7	-	12.2	12.5	SB, LM, MS
1-8-13	80.5	191.7	-	12.0	12.3	SB, LM, MS
1-9-13	81.3	192.3	N/A	12.4	12.7	LM
1-10-13	81.8	193.3	-	12.2	12.5	SB, LM, MS
1-11-13	82.4	193.3	-	12.7	13.0	SB, LM, MS
1-12-13	82.9	194.5	-	12.8	13.1	SB, DA, RP
1-13-13	83.6	195.1	-	12.6	12.9	SB, DA, RP
1-14-13	84.1	196.0	-	12.4	12.7	SB, LM, MS
1-15-13	84.4	196.6	-	21.4	21.7	SB, MS
1-16-13	84.4	196.6	-	26.1	26.5	SB, LM, MS
1-17-13	84.4	196.6	-	28.1	28.5	SB, LM, MS
1-18-13	106.8	196.6	-	25.6	26.0	SB, LM, MS
1-19-13	127.3	197.1	-	13.0	12.7	MS, RP, PA
1-20-13	130.1	200.1	-	12.8	13.2	MS, PA, RP
1-21-13	132.8	203.1	-	12.4	12.7	MS, RP, PA
1-22-13	135.4	205.4	-	12.9	13.2	SB, LM, MS
1-23-13	137.6	208.3	-	9.4	12.6	SB, LM, MS
1-24-13	140.2	211.2	-	12.7	13.0	LM, MS
1-25-13	142.3	213.3	-	11.8	12.7	SB, LM, MS
1-26-13	144.6	215.6	-	10.4	13.2	MS, MS, SM
1-27-13	146.7	217.7	-	12.7	13.1	MS, MS, SM
1-28-13	148.1	219.2	-	12.7	13.1	SB, LM, MS
1-29-13	150.0	221.3	-	12.9	13.3	SB, LM, MS
1-30-13	152.4	223.6	-	12.7	13.1	SB, LM, MS
1-31-13	154.1	225.0	-	21.5	22.0	SB, LM, MS

Signature:

Date: Feb 5 13



City of Richmond
Department of Public Utilities - Wastewater Treatment Plant
NINE MINIMUM CONTROL'S REPORT

MCCLOY PUMP STATION
MONTHLY PUMP READINGS

WORK ORDER #

9223738

YEAR >

2013

CIRCLE THE MONTH: JAN FEB MAR APR MAY JUNE JULY AUG SEPT OCT NOV DEC

Asset PM Group Name: WWTP STATIONS

PM ID Number: 854

Asset Numbers: 0001602, 0005152, 0005178, 0005455

Asset Description: WWTP PUMP STATIONS - HAMPTON, DOUGLASADLE, UPHAMBROOK, MCCLOY

Asset Location: 4 Different Locations Based on Location of Pump Station

PM Frequency: Monthly

DATE	PUMP #1 0005933	PUMP #2 0005934	PUMP #3 N/A	Wetwell	Tunnel	NAME
2-1-13	155.8	237.4	-	12.9	13.3	SB, LM, MS
2-2-13	158.7	240.5	-	12.9	13.3	CB WR SS
2-3-13	161.8	244.1	-	12.9	13.3	CB WR SS
2-4-13	165.2	247.5	-	10.4	13.2	SB, LM, MS
2-5-13	168.4	251.1	-	12.9	13.3	LM, m, c
2-6-13	171.4	254.5	-	7.5	13.3	SB, LM, MS
2-7-13	174.8	258.0	-	12.9	13.3	SB, LM, MS
2-8-13	178.4	261.8	-	15.2	12.1	SB, LM, MS
2-9-13	181.7	277.4	-	8.6	13.2	CB SB AR
2-10-13	185.2	277.1	-	10.7	13.2	CB, SB AR
2-11-13	188.7	280.8	-	12.2	13.3	SB, LM, MS
2-12-13	192.8	284.8	-	11.0	13.5	LM, m, c
2-13-13	196.1	288.3	-	8.3	13.6	SB, LM
2-14-13	199.9	292.2	-	11.4	13.5	SB, LM
2-15-13	203.3	295.9	-	10.1	13.5	SB, MS
2-16-13	206.8	299.4	-	8.3	13.6	SB, SS, DA
2-17-13	210.6	303.1	-	9.5	13.6	SB, SS, DA
2-18-13	214.0	306.8	-	9.9	13.7	SB, SS, DA
2-19-13	217.8	310.6	-	12.9	13.7	SB, LM, MS
2-20-13	221.2	314.3	-	12.9	13.7	SB, LM, MS
2-21-13	224.6	317.8	-	11.1	13.9	SB, LM
2-22-13	228.1	321.3	-	11.4	14.0	SB, LM
2-23-13	231.6	324.9	-	9.6	14.0	CB RP PA
2-24-13	234.9	328.4	-	11.8	14.1	CB RP PA
2-25-13	238.3	332.0	-	12.9	14.1	SB, LM, MS
2-26-13	241.9	335.5	-	8.7	14.1	SB, LM, MS
2-27-13	243.5	337.5	-	19.8	20.1	SB, LM, MS
2-28-13	243.5	337.5	-	20.6	21.0	SB, LM

Signature

[Signature]

Date

2-28-13



City of Richmond
Department of Public Utilities - Wastewater Treatment Plant
NINE MINIMUM CONTROL'S REPORT

MCCLOY PUMP STATION
MONTHLY PUMP READINGS

WORK ORDER #

1224108

YEAR >

2013

CIRCLE THE MONTH: JAN FEB MAR APR MAY JUNE JULY AUG SEPT OCT NOV DEC

Asset PM Group Name: WWTP STATIONS

PM ID Number: 854

Asset Numbers: 0001602, 0005152, 0005178, 0005455

Asset Description: WWTP PUMP STATIONS - HAMPTON, DOUGLASADLE, UPHAMBROOK, MCCLOY

Asset Location: 4 Different Locations Based on Location of Pump Station

PM Frequency: Monthly

	PUMP #1	PUMP #2	PUMP #3			
	0005933	0005934	N/A	Wetwell	Tunnel	NAME
DATE						
3-1-13	243.5	337.5	-	21.4	21.7	SB, LM, MS
3-2-13	243.5	337.5	-	22.0	22.4	SB, SM, RP
3-3-13	243.5	337.5	-	22.7	23.1	SB, SM, RP
3-4-13	243.5	337.5	-	23.2	23.6	SB, LM, MS
3-5-13	245.4	355.1	-	9.2	13.5	SB, LM, MS
3-6-13	247.6	357.3	-	67.7	68.3	SB, LM, MS
3-7-13	247.0	357.3	-	67.1	67.7	SB, LM, MS
3-8-13	247.6	357.3	-	66.9	67.5	SB
3-9-13	247.0	357.3	-	66.9	67.5	MS
3-10-13	247.0	357.3	-	66.9	67.5	MS
3-11-13	247.0	357.3	-	66.9	67.5	SB
3-12-13	247.0	357.3	-	67.0	67.5	SB
3-13-13	247.0	357.3	-	67.1	67.6	SB
3-14-13	251.7	357.4	-	36.2	36.4	SB
3-15-13	251.7	381.2	-	24.9	25.3	SB
3-16-13	252.8	403.2	-	8.7	13.7	MS, MS, AR
3-17-13	254.7	405.8	-	19.9	20.2	MS, MS, AR
3-18-13	254.7	405.8	-	21.4	21.7	SB
3-19-13	254.7	405.8	-	22.4	22.8	SB, MS
3-20-13	254.7	405.8	-	23.1	23.5	SB, LM, MS
3-21-13	254.7	405.8	-	23.8	24.2	LM, MS
3-22-13	254.7	405.8	-	24.5	24.8	SB, LM, MS
3-23-13	264.7	406.8	-	25.1	25.5	CB, RA, RP
3-24-13	274.3	406.8	-	9.0	13.6	CB, RA, RP
3-25-13	279.4	412.3	-	10.1	13.8	SB, LM, MS
3-26-13	284.2	417.3	-	9.0	13.7	SB, LM, MS
3-27-13	289.2	422.2	-	8.1	13.7	MS, LM
3-28-13	293.5	426.9	-	12.4	13.6	SB, LM, MS
3-29-13	298.1	431.5	-	12.8	13.8	SB, CB, RA, RP
3-30-13	302.8	436.0	-	10.5	14.0	SB, RA, CL
3-31-13	307.5	440.8	-	11.4	14.1	SB, RA, CL

Signature: B. Boedley

Date: 4/2/13



City of Richmond
Department of Public Utilities - Wastewater Treatment Plant
NINE MINIMUM CONTROL'S REPORT

**MCCLOY PUMP STATION
MONTHLY PUMP READINGS**

WORK ORDER #

YEAR >

2013

CIRCLE THE MONTH: JAN FEB MAR APR MAY JUNE JULY AUG SEPT OCT NOV DEC

Asset PM Group Name: WWTP STATIONS

PM ID Number: 854

Asset Numbers: 0001602, 0005152, 0005178, 0005455

Asset Description: WWTP PUMP STATIONS - HAMPTON, DOUGLASADLE, UPHAMBROOK, MCCLOY

Asset Location: 4 Different Locations Based on Location of Pump Station

PM Frequency: Monthly

DATE	PUMP #1 0005933	PUMP #2 0005934	PUMP #3 N/A	Wetwell	Tunnel	NAME
4-1	318.8	441.2	-	11.6	13.3	SB
4-2	323.2	441.2	-	11.0	13.4	SB
4/3/13	333.7	441.2	-	8.2	13.6	MS, LM
4-4-13	340.5	441.2	-	10.5	13.5	LM, MC
4-5-13	343.6	444.8	-	20.3	20.6	SB, LM
4-6-13	343.6	444.8	N/A	21.2	21.5	STAVE, FOX, PEAKS
4-7-13	343.6	444.8	N/A	22.0	22.4	FOX, STAVE, PEAKS
4-8-13	343.6	444.8	-	22.8	23.1	SB, LM, MS
4-9-13	358.9	446.8	-	13.4	13.7	MS, LM
4-10-13	363.6	451.0	-	7.0	13.4	SB, LM, MS
4-11-13	367.8	455.8	-	10.5	13.6	SB, LM, MS
4-12-13	372.2	460.7	-	21.7	22.1	SB, LM, MS
4-13-13	372.2	460.7	-	23.1	23.5	SB, CB, WR
4-14-13	372.2	460.7	-	23.8	24.2	SB, CB, WR
4-15-13	372.2	460.7	-	24.5	24.9	SB
4-16-13	372.2	460.7	-	25.1	25.5	SB, LM
4-17-13	376.8	460.7	-	24.1	24.5	SB, LM, MS
4-18-13	394.5	461.6	-	12.8	13.3	SB, LM, MS
4-19-13	398.5	465.8	-	10.9	13.3	SB, LM, MS
4-20-13	399.8	467.1	-	20.0	21.3	SB, CB, AR
4-21	399.8	467.1	-	22.1	22.4	SB, CB, AR
4-22	399.8	467.1	-	23.0	23.4	SB, LM, MS
4-23	412.3	472.7	-	5.2	13.3	SB, LM, MS
4-24	417.9	478.2	-	10.6	13.5	SB
4-25	421.7	482.8	-	9.7	13.5	SB, LM, MS
4-26	424.7	488.7	-	10.0	13.4	SB
4/27/13	430.2	492.8	-	8.5	13.2	MS, RP, DA
4/28/13	434.6	497.9	N/A	9.1	13.2	MS, RP, DA
4-29	439.3	503.0	-	18.3	18.4	SB, LM, MS
4-30	439.3	503.0	-	20.5	20.9	SB, LM, MS

Signature: [Signature]

Date: 5-1-13



City of Richmond
Department of Public Utilities - Wastewater Treatment Plant
NINE MINIMUM CONTROL'S REPORT

MCCLOY PUMP STATION
MONTHLY PUMP READINGS

WORK ORDER #

P224365

YEAR >

2013

CIRCLE THE MONTH: JAN FEB MAR APR MAY JUNE JULY AUG SEPT OCT NOV DEC

Asset PM Group Name: WWTP STATIONS

PM ID Number: 854

Asset Numbers: 0001602, 0005152, 0005178, 0005455

Asset Description: WWTP PUMP STATIONS - HAMPTON, DOUGLASADLE, UPHAMBROOK, MCCLOY

Asset Location: 4 Different Locations Based on Location of Pump Station

PM Frequency: Monthly

DATE	PUMP #1	PUMP #2	PUMP #3	Wetwell	Tunnel	NAME
	0005933	0005934	N/A			
5-1-13	439.3	505.6	-	20.6	21.0	SB, LM, MS
5-2	441.7	516.9	-	12.6	13.0	SB, LM, MS
5-3	445.8	521.9	-	8.8	13.1	SB, LM, MS
5-4	449.7	526.5	-	10.5	13.1	CB, CL, SM
5-5	453.8	531.4	-	11.2	13.3	CB, CL, SM
5-6	457.7	536.2	-	14.3	14.7	SB, LM, MS
5-7-13	461.9	547.1	-	16.0	17.1	LM, MR
5-8-13	463.3	551.1	-	19.9	20.2	LM, RB
5-9-13	463.3	551.1	-	24.4	24.8	LM, MC
5-10-13	463.3	551.1	-	24.9	25.3	LM, MS
5-11-13	463.3	551.1	-	25.5	25.9	MS, RP, PA
5-12-13	463.3	553.8	-	25.5	25.9	MS, RP, PA
5-13-13	482.9	555.1	-	7.9	13.3	SB, LM, MS
5-14-13	486.4	559.0	-	8.9	13.5	LM, MC
5-15	490.2	563.4	-	9.9	13.6	MS, SB, LM
5/16/13	494.6	568.4	-	10.7	13.6	MS, LM, SB
5-17	497.4	576.9	-	13.1	13.8	SB, LM
5-18	505.4	586.8	-	11.0	15.0	SB, CL
5-19	509.0	589.0	-	9.4	14.6	SB, CL
5-20	513.0	593.0	-	12.1	14.7	SB, LM
5-21	517.0	597.4	-	11.6	14.7	SB, LM
5-22	521.1	601.9	-	8.6	14.6	SB, LM
5-23	525.6	606.6	-	9.2	14.5	SB, LM
5-24	526.0	608.3	-	19.3	19.7	SB, LM
5-25	526.2	608.3	N/A	20.3	20.7	FOX, AR, CB
5-26	526.2	608.3	N/A	21.2	21.6	FOX, AR, CB
5-27	526.2	608.3	N/A	21.9	22.3	FOX, AR, CB
5-28	526.4	608.3	-	22.4	23.1	SB, LM, MS
5/29/13	530.4	610.5	N/A	7.6	13.3	LM, MS
5-30	544.4	614.7	-	9.4	13.4	SB, LM, MS
5-31	548.5	619.2	-	10.6	13.4	SB, LM, MS

Signature: [Signature]

Date: 6-4-13



City of Richmond
Department of Public Utilities - Wastewater Treatment Plant
NINE MINIMUM CONTROL'S REPORT

MCCLOY PUMP STATION
MONTHLY PUMP READINGS

WORK ORDER #

P224637

YEAR >

2013

CIRCLE THE MONTH: JAN FEB MAR APR MAY JUNE JULY AUG SEPT OCT NOV DEC

Asset PM Group Name: WWTP STATIONS

PM ID Number: 854

Asset Numbers: 0001602, 0005152, 0005178, 0005455

Asset Description: WWTP PUMP STATIONS - HAMPTON, DOUGLASADLE, UPHAMBROOK, MCCLOY

Asset Location: 4 Different Locations Based on Location of Pump Station

PM Frequency: Monthly

	PUMP #1	PUMP #2	PUMP #3			
DATE	0005933	0005934	N/A	Wetwell	Tunnel	NAME
6-1	552.8	623.7	N/A	8.7	13.5	FOX, PA, RP
2	552.1	628.3	N/A	12.1	13.5	FOX, PA, RP
3	559.4	630.7	-	20.8	21.1	SB, LM, MS
4	570.1	630.9	-	10.0	14.5	SB, LM, MS
5	574.1	635.3	-	11.1	14.3	SB, LM, MS
6	577.6	639.8	-	9.6	14.4	SB, LM, MS
7	582.1	643.8	-	13.5	14.4	SB, LM, MS
8	581.3	644.1	-	67.0	67.6	SB, KA, CL
9	602.3	644.1	-	25.9	26.3	SB, KA, CL
10	625.0	644.8	-	6.8	14.0	SB, LM, MS
11	625.7	645.5	-	22.7	23.6	SB, LM
12	625.7	645.5	-	23.1	23.5	SB, LM, MS
13	625.7	645.5	-	23.2	23.6	SB, LM, MS
14	625.7	645.5	-	27.8	28.6	SB, LM, MS
6/15/13	625.7	645.5	-	28.1	28.5	MS, SM, RP
6/16/13	625.7	645.5	-	28.3	28.7	MS, RP, SM
6-17	648.2	648.8	-	22.0	22.4	SB, LM, MS
6-18	659.5	649.9	-	7.1	13.0	SB, LM, MS
6-19	659.6	655.5	-	27.6	28.0	SB, LM, MS
6-20	659.6	655.5	-	28.1	28.6	SB, LM, MS
6-21	670.3	655.5	-	26.3	27.0	SB, LM, MS
6-22-13	693.4	655.5	-	22.3	23.0	MS, CL, WR
6-23-13	716.4	655.5	-	20.3	20.7	MS, CL, WR
6-24-13	718.7	655.5	-	21.0	21.3	2nd
6-25	728.6	657.3	-	12.4	13.3	SB, LM, MS
6-26	732.8	661.8	-	12.9	13.3	SB, LM, MS
6-27	737.5	666.9	-	12.6	13.4	SB, LM, MS
6-28	742.0	671.6	-	7.9	13.6	SB, LM, MS
6-29	743.6	673.2	-	14.6	20.0	ON SO AR
6-30	743.6	673.2	-	20.7	21.1	ON SO AR

Signature: B. B. B. B. B.

Date: 6 30 13



City of Richmond
Department of Public Utilities - Wastewater Treatment Plant
NINE MINIMUM CONTROL'S REPORT

**MCCLOY PUMP STATION
MONTHLY PUMP READINGS**

WORK ORDER #

P22 4813

YEAR >

2013

CIRCLE THE MONTH: JAN FEB MAR APR MAY JUNE JUL AUG SEPT OCT NOV DEC

Asset PM Group Name:	WWTP STATIONS
PM ID-Number:	854
Asset Numbers:	0001602, 0005152, 0005173, 0005455
Asset Description:	WWTP PUMP STATIONS - HAMPTON, DOUGLASDALE, UPHAMSBROOK, MCCLOY
Asset Location:	4 Different Locations Based on Location of Pump Station
PM Frequency:	Monthly

DATE	PUMP #1 0005933	PUMP #2 0005934	PUMP #3 N/A	Wetwell	Tunnel	NAME
7-1-13	743.6	673.2	-	25.8	26.2	SB, LM, SG
7-2	743.4	673.2	-	67.1	67.4	SB, LM, SG
7-3	743.4	673.2	-	67.1	67.4	SB, LM, SG
7-4	743.6	673.2	-	67.0	67.6	SB, CB
7-5	743.7	673.2	-	67.0	67.6	SB, LM, SG
7-6	743.7	673.2	-	67.0	67.6	SB, KA, RP
7-7	743.7	690.7	-	27.7	28.1	SB, KA, RP
7-8	743.7	715.4	-	19.8	20.1	SB, LM, SG
7-9	746.4	724.9	-	10.7	12.9	SB, LM, SG
7-10	750.8	729.3	-	7.1	13.1	SB, LM, SG
7-11	752.7	736.7	-	23.5	23.8	SB, LM, SG
7-12	752.7	736.7	-	24.8	25.2	SR, SG, LM
7-13	752.7	730.7	N/A	25.4	25.9	FOX, DA, CL
14	752.7	730.7	N/A	26.9	27.2	FOX, DA, CL
15	752.7	730.7	-	27.6	28.0	SB, LM, SG
16	779.0	731.0	-	10.0	13.7	SB, SG
17	782.5	734.7	-	10.0	13.5	SB, LM, SG
18	786.8	739.2	-	10.6	13.8	SB, LM, SG
19	791.5	744.1	-	13.3	14.0	SR, LM, SG
20	795.9	746.8	-	12.4	14.2	CB, AP, SM
21	801.0	753.9	-	10.9	14.4	SB, SM, RP
22	802.6	755.9	-	24.9	25.2	SB, LM
23	802.6	755.9	-	27.4	27.7	SB, LM, SG
24	802.6	755.9	-	28.1	28.5	SB
25	807.3	755.9	-	26.8	27.2	SB
26	830.7	757.1	-	10.9	13.5	SB, LM, SG
27	835.1	761.7	-	12.6	13.8	SB, WR, CL
28	839.7	766.4	-	10.8	13.9	SB, WR, CL
29	841.6	768.5	-	22.9	23.3	SB, LM, SG
30	841.6	768.5	-	23.7	24.1	SB, LM, SG
31	841.6	768.5	-	24.3	24.7	SB, SS

Signature: B. Bentley

Date: August 1st 13



City of Richmond
Department of Public Utilities - Wastewater Treatment Plant
NINE MINIMUM CONTROL'S REPORT

MCCLOY PUMP STATION
MONTHLY PUMP READINGS

WORK ORDER #

YEAR >

2013

CIRCLE THE MONTH: JAN FEB MAR APR MAY JUNE JULY AUG SEPT OCT NOV DEC

Asset PM Group Name: WWTP STATIONS

PM ID Number: 854

Asset Numbers: 0001602, 0005152, 0005178, 0005455

Asset Description: WWTP PUMP STATIONS - HAMPTON, DOUGLASADLE, UPHAMBROOK, MCCLOY

Asset Location: 4 Different Locations Based on Location of Pump Station

PM Frequency: Monthly

	PUMP #1	PUMP #2	PUMP #3			
DATE	0005933	0005934	N/A	Wetwell	Tunnel	NAME
8-1	841.6	768.5	-	25.9	26.3	SB, SS
8-2	841.6	768.5	-	35.7	36.1	SB, SS
8-3-13	841.6	768.5	-	60.5	61.1	ms, AR, RP
8-4-13	841.6	768.5	-	66.9	67.5	ms, AR, RP
8-5	866.3	768.5	-	24.4	24.8	SB, SS
8-6	884.2	769.3	-	23.0	23.4	SB, SS
8-7	884.2	791.5	-	18.6	18.9	SB, SS
8-8	887.1	802.4	N/A	2.3	13.5	N/A
8-9	891.5	806.9	N/A	8.7	13.6	N/A
8-10	896.0	811.7	N/A	9.5	13.6	CB RP DA
8-11	915.5	812.9	N/A	19.0	19.8	CB RP DA
8-12	917.7	812.9	-	19.7	20.3	SB, CB
8-13	929.7	815.7	-	12.0	13.5	SB, SS, CB
8-14	934.9	820.9	-	8.0	13.7	SB, SS, CB
8-15	937.7	825.8	-	11.9	14.9	SB, SS, CB
8-16	941.7	830.3	-	12.4	15.4	SB, SS, CB
8-17	945.6	834.6	-	12.3	15.7	SB, CB, KA, CL
8-18	948.3	837.5	-	18.2	18.6	SB, KA, CL
8-19	948.3	837.5	-	20.0	20.3	SB, SS, CB
8-20	949.0	853.5	-	12.7	14.1	SB, SS, CB
8-21	953.0	857.7	-	8.1	14.6	SB, SS, CB
8-22	956.9	862.3	-	7.7	14.4	SB, SS, CB
8-23	961.8	868.8	-	16.1	14.6	SB, SS, CB
8-24	961.8	886.1	-	23.2	23.5	SB, SM, RP
8-25	961.8	911.0	-	17.9	18.3	SB, SM, RP
8-26	964.7	920.6	-	12.4	13.6	SB, SS, CB
8-27	970.0	925.3	-	12.7	13.8	CB
8-28	973.0	929.8	-	11.3	14.0	SB, SS, CB
8-29	975.6	944.5	-	16.6	14.9	SB, RB
8-30	977.7	952.5	-	12.3	14.5	CB, SS
8-31	983.1	956.4	-	11.7	14.8	FOX, WR, CL

Signature:

Steven Black

Date:

9 3 / 13



City of Richmond
Department of Public Utilities - Wastewater Treatment Plant
NINE MINIMUM CONTROL'S REPORT

**MCCLOY PUMP STATION
MONTHLY PUMP READINGS**

WORK ORDER #

1225287

YEAR >

2013

CIRCLE THE MONTH: JAN FEB MAR APR MAY JUNE JULY AUG SEPT OCT NOV DEC

Asset PM Group Name: WWTP STATIONS

PM ID Number: 854

Asset Numbers: 0001602, 0005152, 0005178, 0005455

Asset Description: WWTP PUMP STATIONS - HAMPTON, DOUGLASDALE, UPHAMBROOK, MCCLOY

Asset Location: 4 Different Locations Based on Location of Pump Station

PM Frequency: Monthly

DATE	PUMP #1 0005933	PUMP #2 0005934	PUMP #3 N/A	Wetwell	Tunnel	NAME
1	987.1	961.0	N/A	12.3	15.0	FOX, WR, CL
2	991.4	965.6	N/A	12.9	15.0	FOX, WR, CL
3	996.5	971.5	-	8.4	15.2	SB, CB
4	1000.0	975.0	-	8.2	15.1	SB, CB
5	1001.2	985.0	-	10.2	15.2	SB, CB
6	1001.2	992.4	-	13.3	15.0	SB, CB, SS
7	1001.2	1001.7	N/A	9.2	15.0	SB, CB, DA
8	1005.5	1006.5	N/A	9.6	15.1	SB, CB, DA
9	1010.2	1011.6	N/A	8.5	15.1	CB
10	1014.2	1016.2	N/A	12.6	15.1	CB
11	1016.5	1020.6	N/A	13.0	15.1	CB
12	1022.7	1025.5	N/A	7.7	15.1	CB
13	1024.6	1027.5	N/A	20.9	21.2	SB
14	1026.8	1038.7	-	10.9	14.4	SB, RP, AR
15	1030.8	1043.1	-	11.3	14.5	SB, RP, AR
16	1035.0	1047.9	-	12.4	14.5	SB, CB
17	1039.2	1052.5	-	12.9	14.5	SB, CB
18	1043.2	1056.8	-	12.6	14.5	SB, CB, SS
19	1046.0	1063.1	-	11.3	11.5	SB, CB
20	1050.6	1070.0	-	13.3	13.9	SB
9/21/13	1059.7	1070.0	-	12.5	12.8	MS, CL, DA
9/22/13	1069.7	1070.0	-	21.1	21.5	DA, CL, MS
9/23/13	1069.7	1070.0	-	22.0	22.4	CB, SB
9/24/13	1096.2	1070.0	-	14.9	15.5	MS
9/25/13	1112.0	1070.0	-	13.6	14.0	CB, SB
9/26/13	1129.7	1070.0	N/A	16.6	17.0	SB
9/27/13	1157.6	1070.0	N/A	17.8	18.2	SB
9-28	1160.4	1070.2	-	18.6	19.0	SB, SM, RP
9-29	1160.6	1070.2	-	19.6	20.1	SB, SM, RP
9-30	1160.8	1070.2	-	20.7	21.1	SB, CB

Signature: Steven Blafney

Date: 9-30-13



City of Richmond

Department of Public Utilities - Wastewater Treatment Plant

NINE MINIMUM CONTROL'S REPORT

MCCLOY PUMP STATION MONTHLY PUMP READINGS

WORK ORDER #

P223644

YEAR >

2013

CIRCLE THE MONTH: JAN FEB MAR APR MAY JUNE JULY AUG SEPT OCT NOV DEC

Asset PM Group Name: WWTP STATIONS

PM ID Number: 854

Asset Numbers: 0001602, 0005152, 0005178, 0005455

Asset Description: WWTP PUMP STATIONS - HAMPTON, DOUGLASADLE, UPHAMBROOK, MCCLOY

Asset Location: 4 Different Locations Based on Location of Pump Station

PM Frequency: Monthly

	PUMP #1	PUMP #2	PUMP #3			
DATE	0005933	0005934	N/A	Wetwell	Tunnel	NAME
10-1	1160.8	1070.2	-	21.0	22.3	SB, CB
10-2	1160.8	1070.2	-	22.2	22.6	SB, CB
10-3	1160.8	1070.2	-	23.2	23.6	SB, CB
10-4	1160.8	1070.2	-	23.4	24.0	SB, CB
10-5	1160.8	1070.2	-	24.3	24.7	SB, CB
10-6	1160.8	1070.2	-	24.8	25.8	SB, CB
10-7	1160.8	1070.2	-	25.6	26.0	SB, CB
10-8	1160.8	1070.2	-	27.2	28.6	SB, CB
10-9	1160.8	1070.2	-	30.8	31.3	SB, CB
10-10	1160.8	1070.2	-	66.8	67.5	SB, CB
10-11	1160.8	1070.2	-	50.1	50.6	SB, CB, SS
10-12	1160.8	1070.2	-	34.6	35.3	SB, CB
10-13	1160.8	1070.2	-	33.1	33.8	SB, CB
10-14	1160.8	1070.2	-	36.0	36.7	SB, CB
10-15	1160.8	1070.2	-	58.9	59.7	SB, CB
10-16	1160.8	1070.2	-	34.1	34.8	SB, CB
10-17	1160.8	1070.2	-	33.2	33.9	SB
10-18	1160.8	1070.2	-	32.4	33.1	SB
19	1160.8	1070.2	N/A	31.5	32.1	FOX, DA, RP
20	1160.8	1070.2	N/A	30.6	31.2	FOX, DA, RP
21	1160.8	1070.2	-	29.9	30.5	SB
22	1160.8	1070.2	-	29.3	29.9	SB
23	1160.8	1070.2	-	30.0	30.6	SB, CB
24	1160.8	1070.2	-	31.1	31.7	SB
25	1160.8	1070.2	N/A	32.6 32.5	33.1	FOX, DA, RP
26	1160.8	1070.2	N/A	33.0 33.6	33.6	FOX, SM, CL
27	1160.8	1070.2	N/A	33.4	34.0	FOX, DA, CL
28	1160.8	1070.2	-	34.0	34.6	SB, CB
29	1160.8	1070.2	-	34.1	34.7	SB, CB
30	1160.8	1070.2	-	32.0	33.4	SB
31	1160.8	1070.2	-	29.3	33.1	SB, CB

Signature: Steven Blaney

Date: 10-31-13



City of Richmond
Department of Public Utilities - Wastewater Treatment Plant
NINE MINIMUM CONTROL'S REPORT

MCCLOY PUMP STATION
MONTHLY PUMP READINGS

WORK ORDER #

P225773

YEAR >

2012

CIRCLE THE MONTH: JAN FEB MAR APR MAY JUNE JULY AUG SEPT OCT NOV DEC

Asset PM Group Name: WWTP STATIONS

PM ID Number: 854

Asset Numbers: 0001602, 0005152, 0005178, 0005455

Asset Description: WWTP PUMP STATIONS - HAMPTON, DOUGLASADLE, UPHAMBROOK, MCCLOY

Asset Location: 4 Different Locations Based on Location of Pump Station

PM Frequency: Monthly

DATE	PUMP #1	PUMP #2	PUMP #3	Wetwell	Tunnel	NAME
	0005933	0005934	N/A			
11-1	1160.8	1070.2	-	34.2	34.8	SB
11-2	1160.8	1070.2	-	28.6	34.1	SB, SM, RP
11-3	1160.8	1070.2	-	27.7	33.7	SB, SM, RP
11-4	1160.8	1070.2	-	24.8	32.9	CB, SB
11-5	1160.8	1070.2	-	24.6	32.2	SB, CB
11-6	1160.8	1070.2	-	27.9	31.1	SB, CB
11-7	1160.8	1070.2	-	10.7	30.7	CB
11-8	1160.8	1070.2	-	13.6	29.9	SB, CB
11-9	1160.8	1070.2	-	28.0	24.3	CB, CL, WR, TB
11-10	1160.8	1070.2	-	28.0	29.5	CB, CL, WR, TB
11-11	1160.8	1070.2	-	29.1	29.6	SB, CB
11-12	1160.8	1070.2	-	29.1	29.7	SB, CB
11-13	1160.8	1070.2	-	29.6	30.0	SB, CB
11-14	1160.8	1070.2	-	29.7	30.1	SB, CB
11-15	1160.8	1070.2	-	29.8	30.2	SB, CB
11-16-13	1160.8	1070.2	-	31.1	32.2	MS, MS, AP
11-17-13	1160.8	1070.2	-	31.8	33.3	MS, MS, AP
11-18	1160.8	1070.2	-	33.8	35.5	SB, CB
11-19-13	1160.8	1070.2	-	45.9	46.18	CB, SB
11-20	1160.8	1070.2	-	55.0	55.9	SB, CB
11-21	1160.8	1070.2	-	59.8	60.4	CB
11-22	1160.8	1070.2	-	32.5	32.8	SB
11-23	1160.8	1070.2	-	29.2	29.5	CB, RP, PA
11-24	1160.8	1070.2	-	26.6	27.0	CB, RP, PA
11-25	1160.8	1070.2	-	24.8	25.1	SB, CB
11-26	1160.8	1070.2	-	23.9	24.1	SB, CB
11-27	1160.8	1070.2	-	25.0	27.4	SB, RP
11-28	1160.8	1070.2	-	26.0	26.5	CB, RP, PA
11-29	1160.8	1070.2	-	25.0	25.3	SB, RP, PA
11-30	1160.8	1070.2	-	23.4	24.0	SB, CB, PA

Signature: Stone Blacking

Date: Dec 2 13



City of Richmond
Department of Public Utilities - Wastewater Treatment Plant
NINE MINIMUM CONTROL'S REPORT

MCCLOY PUMP STATION
MONTHLY PUMP READINGS

WORK ORDER # **P223955** YEAR > **2013**

CIRCLE THE MONTH: JAN FEB MAR APR MAY JUNE JULY AUG SEPT OCT NOV **DEC**

Asset PM Group Name:	WWTP STATIONS
PM ID Number:	854
Asset Numbers:	0001802, 0005152, 0005178, 0005455
Asset Description:	WWTP PUMP STATIONS - HAMPTON, DOUGLASADLE, UPHAMBROOK, MCCLOY
Asset Location:	4 Different Locations Based on Location of Pump Station
PM Frequency:	Monthly

	PUMP #1	PUMP #2	PUMP #3			
DATE	0005933	0005934	N/A	Watwell	Tunnel	NAME
12-1	1160.8	1070.2	-	23.8	24.2	SB, CB, DA
12-2	1160.8	1070.2	-	23.9	24.3	SB, CB
12-3	1160.8	1070.2	-	23.9	24.3	SB, CB
12-4	1160.8	1070.2	-	21.9	22.1	SB, CB
12-5	1160.8	1070.2	-	19.5	19.8	SB
12-6	1160.8	1070.2	-	18.2	18.5	SB, CB
7	1160.8	1070.2	N/A	16.9	17.7	FOX, SM, RP
8	1160.8	1070.2	N/A	13.9	14.1	FOX, SM, RP
9	1160.8	1070.2	-	15.2	21.3	SB, CB
10	1160.8	1070.2	-	15.8	19.8	SB, CB
11	1160.8	1070.2	-	16.2	17.2	SB
12	1160.8	1070.2	-	7.6	7.9	SB, CB
13	1160.8	1070.2	-	11.5	13.7	SB, CB
14	1160.8	1070.2	N/A	12.5	14.9	SB, CB
15	1160.8	1070.2	N/A	21.8	22.1	SB, CB
16	1160.8	1070.2	-	21.0	21.4	SB
17	1160.8	1070.2	-	21.2	21.6	SB, CB
18	1160.8	1070.2	-	19.1	19.4	SB, CB
19	1160.8	1070.2	-	11.1	9.8	SB, CB
20	1160.8	1070.2	-	13.9	14.1	CB
21	1160.8	1070.2	-	13.4	13.7	SB, MS, AR, CB
22	1160.8	1070.2	-	14.8	15.1	SB, MS, M
23	1160.8	1070.2	-	17.9	21.4	SB, CB, AR
24	1160.8	1070.2	-	18.8	19.1	SB, CB, AR
25	1160.8	1070.2	-	9.4	9.8	SB, CB, AR
26	1160.8	1070.2	-	11.5	14.9	CB, SB
27	1160.8	1070.2	-	11.4	14.1	SB, CB
28	1160.8	1070.2	-	12.9	15.7	MS, RP, DA
29	1160.8	1070.2	-	13.8	17.6	CB, RP, DA
30	1160.8	1070.2	-	17.7	24.8	SB, CB

Signature: Steve Blakney

Date: 12-31-13

Combined Sewer System Report for 2013

APPENDIX 4-3

Sewer Flushing, Cleaning and TV

CITY OF RICHMOND, VIRGINIA
DEPARTMENT OF PUBLIC UTILITIES
NINE MINIMUM CONTROLS REPORT

YEARLY
SEWER TV/CLEANING REPORT

YEAR: 2013

DATE	MONTHLY TOTAL LENGTH OF SEWER TELEVISED	MONTHLY TOTAL LENGTH OF SEWER CLEANED
January	21,514	29,409
February	15,808	17,746
March	12393	24,588
April	11,159	9,969
May	11,679	16,404
June	8,491	22,591
July	11,758	18,559
August	14,206	27,235
September	27,737	10,183
October	13,521	26,382
November	19,162	22,128
December	18,286	19,478
YEARLY TOTAL	185,714	244,672

CITY OF RICHMOND, VIRGINIA
DEPARTMENT OF PUBLIC UTILITIES
NINE MINIMUM CONTROLS REPORT

MONTHLY
SEWER TV/CLEANING REPORT

YEAR: 2013MONTH: January

DATE	BLOCK	LOCATION	PIPE SIZE	SEWER LENGTH (FT)	
				TELEVISED	CLEANED
2	400	Henri Rd	8	125	125
2	1700	Floyd Ave	15	5	5
2	400	Tuckahoe Blvd	18	331	331
2	1926	Mapleshade Lane	6	32	
2	1814	EDWARDS ST	6		40
2	4500	Patterson Ave	8	78	78
2	4000	Lafayette St	15	344	344
2	3300	W Franklin St	18	247	247
2	4300	Patterson Ave	30	16	16
2	3900	Patterson Ave	36	419	419
3	5300	Kingsbury Rd	15	109	109
3	2900	Kensington Ave	15	324	324
3	2900	Kensington Ave	15	56	56
3	3400	Stuart Ave	18	268	268
3	5500	Grove Ave	8	25	25
3	5400	Kingsbury Rd	8	41	41
3	800	Libbie Ave	8	356	356
3	1100	Libbie Ave	8	181	181
3	900	Libbie Ave	8	78	78
3	5800	Park Ave	8	35	35
3	4500	E Seminary Ave alley	8	199	199
3	5800	Christopher Ln	10	455	455
3	4500	E Seminary Ave alley	24	126	126
3	5816	Westower Dr	8		700
3	5200	Wavely Ave	8		619
4	2400	Westwood Ave	12	157	157
4	2400	Westwood Ave	12	20	20
4	600	Hazelhurst Ave	8	17	
4	1901	WOOD ST	6		40
7	2700	Courtland St	12	35	35
7	2700	Courtland St	12	176	176
7	2700	Courtland St	12	190	190
7	1106	Libbie Ave	8		429
7	3412	FRANK RD	6		35
7	3400	Hanover Ave	18	25	25
7	3400	Hanover Ave	18	429	429
7	3900	Patterson Ave	32	239	239
7	3900	Patterson Ave	32	80	80
8	3400	Hanover Ave	15	374	374
8	700	N Hamilton St	18	205	205
8	700	N Hamilton St	42	384	384
8	800	N Hamilton St	42	488	488
8	5800	Pratt St alley	8	382	382
8	1900	Stuart Ave	12	50	50
8	3830	Sunora Dr	8	180	
8	2701	W Main St	8	205	
8	102	Matoaka Rd	8	67	

YEAR: 2013

MONTH: January

DATE	BLOCK	LOCATION	PIPE SIZE	SEWER LENGTH (FT)	
				TELEVISED	CLEANED
8	216	Blake Lane	8		209
8	3400	Scottview Dr	8		620
8	3400	Scottview Dr	8		360
8	307	W Roberts	6		8
8	1205	Jefferson Davis Hwy	8		319
8	307	W. ROBERTS	6		50
9	2300	Park Ave	12	382	382
9	2300	E Marshall St	16	340	340
9	2012	Rose Ave	6	80	
9	1400	Brander St	15		401
9	2701	W Main St	6		12
9	5	VIRGINIA AVE	6		120
9	3800	Patterson Ave	8	171	171
9	3500	Hanover Ave	24	372	372
9	600	N Nansemond St	24	335	335
10	3400	W Franklin St	15	283	283
10	3400	Park Ave	20	466	466
10	4200	Antrim/Patterson intersection	42	420	420
10	2900	W Grace St	36	325	325
10	19th	Hull St	6		55
10	6216	GLYNDON LN	6		40
11	3100	Cottingham Rd	8	187	187
11	3100	Cottingham Rd	8	72	72
11	3000	Cottingham Rd	8	27	27
11	1200	W 48th St	12	382	382
11	1200	W 48th St	18	382	382
11	5232	Sheridan Lane	6	40	
11	1420	Sunbury Rd	6	50	
11	1307	Wentbridge	6	80	
11	3200	Hazelhurst Ave	6		30
11	1900	Laburnum Ave	8		906
11	3805	MOSS SIDE AVE	6		24
11	615	HOLLY SPRINGS RD	6		35
11	3200	Park Ave	15	32	32
11	700	Cleveland St	15	151	151
11	5300	Patterson Ave	27	381	381
11	4200	Antrim Ave	48	324	324
14	3900	W Grace St	10	410	410
14	2300	Hanover Ave	20x30	391	391
14	800	N Hamilton St	18	271	271
14	800	N Hamilton St	18	77	77
15	3400	Rosewood Ave	12	506	506
15	200	N 19th St	12	286	286
15	3000	W Broad St	20	9	9
16	3400	Rosewood Ave	12	67	67
16	1040	Woodhaven Dr	8	88	
16	937	Barlen Dr	8		405
16	967	Barlen Dr	8		415
16	425	Cross Rd	8		425
16	8506	CHIPPINHAM PKWY	6		71
17	2900	Grove Ave	36	335	335
17	2800	Grove Ave	36	49	49
17	2900	Grove Ave	48	83	83
17	2800	Grove Ave	48	11	11

YEAR: 2013

MONTH: January

DATE	BLOCK	LOCATION	PIPE SIZE	SEWER LENGTH (FT)	
				TELEVISED	CLEANED
17	10	Stonehurst Green	8	70	70
17	10	Stonehurst Green	8	128	128
17	10	Stonehurst Green	8	120	120
17	2800	North Ave	6		283
17	Essex	North Ave	8		239
18	Portland	Dover Rd	12		209
20	2700	HANES AVE	8		500
21	300	Off Greenway	8	223	223
21	300	Greenway	8	324	324
21	1300	Roseneath Road	12	348	348
22	600	Cleveland St	18	246	246
22	500	N Sheppard St	20	395	395
22	500	Tuckahoe Blvd	8	331	331
22	500	Tuckahoe Blvd	8	251	251
22	1800	Monument Ave alley	12	428	428
23		Alley btw N Boulevard and N Mulberry	12	118	118
23	1500	Alaska Dr	24	380	380
24	10	N 20th St	8	1	1
24	1000	Woodhaven Ave	8	401	401
25	4300	New Kent Ave	24	336	336
25	3300	Kingston Ave	36	320	320
26	3325	Hopkins Rd	6	48	
26	1021	Goddin St	6	78	
27	309	Granite Ave	6	20	
27	708	Harrison Ave	6	48	
28	3200	Edgewood Ave	8	21	21
28	2500	Dana St	12	161	161
28	2500	Dana St	12	107	107
28	3815	Kensington Ave	6	8	
28	200	W Laburnum	8		429
29	800	N Hamilton St	6	29	29
29	1300	Victor St	8	1	1
29	600	Woodhaven Ave	10	365	365
29	2724	Q St	6	32	
29	309	GRANITE AVE	6		40
29	609	N 37TH	6		40
30	1000	Goddin St	18	340	340
30	200	W Laburnum	8		860
31	10	N Shields Ave	8	180	180
31	400	Libbie Ave	10	238	238
				21514	29409

CITY OF RICHMOND, VIRGINIA
DEPARTMENT OF PUBLIC UTILITIES
NINE MINIMUM CONTROLS REPORT

MONTHLY
SEWER TV/CLEANING REPORT

YEAR: 2013MONTH: February

DATE	BLOCK	LOCATION	PIPE SIZE	SEWER LENGTH (FT)	
				TELEVISED	CLEANED
1	10164	GARFIELD RD	6	75	
1	3600	Chamberlayne Ave	18	539	539
1	3600	Chamberlayne Ave	18	303	303
1	3400	Chamberlayne Ave	18	305	305
1	3400	Chamberlayne Ave	18	292	292
1	3200	Chamberlayne Ave	18	512	512
1	3200	Chamberlayne Ave	18	491	491
1	100	Sheppard	24	39	39
1	100	Sheppard	24	165	165
2	1220	Apperson St	6	32	
4	6714	Kensington Ave	6	60	
4	2012	ORLANDO RD	6	22	
4	720	E 6TH STREET	6		70
4	900	Dunbar St	8	350	350
4	5200	Waverly Ave	8	140	140
4	5200	Waverly Ave	8	370	370
5	6	E 19TH STREET	6	55	
5	2700	HANES AVE	6	33	
5	211	W 34th St	8		701
5	100	W 34th St	8		329
5	200	W 34th St	8		580
5	5000	Patterson Av	8	310	310
5	100	W 33rd St	8	381	381
5	3000	Chamberlayne Ave	18	237	237
6	1011	E 16ST	6	40	
6	3031	FOREST HILL AVE	6	40	
6	100	W 34th St	6		50
6	5100	Patterson Av	8	493	493
7	2105	Ridgemont Rd	6	31	
7	1600	Miniffee St	6	45	
7	715	ROTHSAY RD	6	23	
7	5300	Patterson Av	8	317	317
7	5300	Patterson Av	8	95	95
7	2500	5th Ave	15	361	361
7	300	Canal St	27	16	16
7	300	Canal St	27	77	77
7	300	Canal St	36	34	34
7	300	Canal St	36	272	272
7	300	Canal St	36	56	56
7	300	Canal St	36	33	33
7	300	Canal St	36	36	36

YEAR: 2013

MONTH: February

DATE	BLOCK	LOCATION	PIPE SIZE	SEWER LENGTH (FT)	
				TELEVISED	CLEANED
7	300	Canal St	36	41	41
7	300	Canal St	36	90	90
7	300	Canal St	36	10	10
7	300	Canal St	36	21	21
8	219	QUEEN CHARLOTTE RD	6	30	
8	309	GRANITE AVE	6	18	
8	3000	SEMMES AVE	6	104	
8	1223	N 26th	12		420
8	1120	N 22nd St	15		470
8	3500	E Marshall St	20x30	146	146
8	400	Tilden St	39	378	378
8	400	Tilden St	39	50	50
9	3300	Watson Ave	6	40	
11	1826	CLIBBORNE ST	6	15	
11	3800	HAWTHORNE AVE	6		500
11	827	HOLLY SPRINGS RD	8		200
11	5100	Patterson Av	8	409	409
11	10	N Shields Ave	12	177	177
11	10	N Shields Ave	42	364	364
12	2412	BUFORD AVE	6	33	
12	1622	COMMERCE RD	6	40	
12	5000	Patterson Av	8	208	208
12	1400	Brookland Park Blvd alley	12	162	162
12	2000	Decatur	15	276	276
12	1400	Brookland Park Blvd alley	15	149	149
12	1900	Decatur	18	291	291
12	2200	Stockton	18	298	298
13	1220	APPERSON ST	6	68	
13	3013	NORTH AVE	6	4	
13	3464	NORTHVIEW PL	8		200
13	100	S 20th St	8	390	390
13	5000	Patterson Av	8	266	266
13	2000	Parkwood Ave	18	26	26
13	2000	Stockton	24	304	304
14	3160	Stockton St	6	60	
14	3001	NINE MILE RD	6	77	
14	3311	DETROIT AVE	6	54	
14	3900	W Grace St	10	408	408
14	2200	Stockton	12	126	126
14	5000	Patterson Av	12	267	267
14	5000	Patterson Av	12	45	45
14	700 - 800	Westmoreland St	15	258	258
14	3000	W Broad St	15	8	8
14	4000	Monument Ave	27	453	453
14	4000	Monument Ave	27	407	407
14	39000	Monument Ave	27	296	296
14	39000	Monument Ave	27	453	453
14	4500	Patterson Av	48	48	48

YEAR: 2013

MONTH: February

DATE	BLOCK	LOCATION	PIPE SIZE	SEWER LENGTH (FT)	
				TELEVISED	CLEANED
15	3953	HOLLY SPRINGS	8		309
15	2100	Everett	8	300	300
15	2200	Everett	8	19	19
15	3400	NORTHVIEW PL	8	56	56
15	1900	Decatur	18	47	47
15	100	Jeff Davis Hwy	18	444	444
15	100	S Belvidere St	26x39	303	303
18	1606	Dinwiddie Ave	6	17	
18	17	S Lombardy St	6	25	
18	3229	5th Ave	6	17	
18	5200	Patterson Av	15	319	319
19	2008	Rose Ave	6	16	
19	1902	WILMINGTON AVE	6	16	
19	2000	Rose Ave	12		400
19	200	Granite Ave	8		450
19	300	Granite Ave	8		160
19	3000	Hanover	12	361	361
19	300	Sheppard	12	74	74
19	5000	Patterson Av	18	63	63
19	1000	Woodhaven Dr	24	350	350
20	314	Granby St	6	30	
20	3300	WATSON AVE	6	40	
20	834	FAYE ST	6	40	
20	3164	DECATURE ST	6	46	
20	3800	Chamberlayne Ave	8		270
20	314	Granby St	6		39
20	400	Sheppard	12	394	394
20	100	S Laurel St	18	313	313
20	5000	Patterson Av	21	342	342
20	100	S Laurel St	16x24	175	175
21	2010	Rose Ave	8	13	
21	2019	PARK AVE	6	30	
21	5100	Patterson Av	8	36	36
21	400	Granite Ave	8	251	251
21	3000	Cottingham Rd	8	187	187
21	3000	Cottingham Rd	8	72	72
21	3000	Cottingham Rd	8	27	27
22	219	Gun Club Rd	6		10
22	300	Nansemond	12	289	289
25	211	Massie Rd	6	118	
25	1309	BROOKLAND PARKWAY	6	88	
25	2800	Patterson	12	395	395
25	3300	Kensington	12	28	28
25	1100	N 33rd St	12	398	398
25	2300	Old Dominion St	12	174	174
25	100	Hull St	36	365	365
25	100	Decatur St	45	364	364
25	100	1st St	45	28	28

YEAR: 2013MONTH: February

DATE	BLOCK	LOCATION	PIPE SIZE	SEWER LENGTH (FT)	
				TELEVISED	CLEANED
26	1124	Hull St	6	60	
26	177	Belt Boulevard St	6	35	
26	5434	KENDALL RD	6	80	
26	3500	Hopkins Rd	8		157
26	6100	Coniston Ave	8	116	116
26	6100	Coniston Ave	8	132	132
26	300	Hull St	12	302	302
26	3300	Franklin	12	476	476
27	1702	GROVE AVE	6	112	
27	400	Henri Rd	8	436	436
27	10	Iris Lane easement	8	124	124
27	200	Hull St	12	527	527
27	100	Hull St	36	60	60
27	100	Hull St	36	183	183
27	100	Hull St	36	55	55
27	100	Hull St	36	55	55
28	2113	Park Ave	6	58	
28	3256	Cliff Ave	8		209
28	3206	CLIFF AVE	8		629
28	3256	CLIFF AVE	8		209
28	3500	Moody Ave	8	355	355
28	3500	Moody Ave	8	73	73
28	1100	Judson Rd	8	91	91
28	1100	N 23rd St	18	333	333
28	3200	Noble Ave	36	73	73
				15808	17746

CITY OF RICHMOND, VIRGINIA
DEPARTMENT OF PUBLIC UTILITIES
NINE MINIMUM CONTROLS REPORT

MONTHLY
SEWER TV/CLEANING REPORT

YEAR: 2013MONTH: March

DATE	BLOCK	LOCATION	PIPE SIZE	SEWER LENGTH (FT)	
				TELEVISED	CLEANED
1	6100	Howard Rd	8	103	103
1	3000	Noble Ave alley	12	346	346
1	3301	Castle wood Rd	6	57	
3	917	Circlewood Dr	6	160	
4	2800	North Ave alley	8	308	308
4	3400	Rosewood Ave	12	130	130
4	300	Jefferson Village Dr	6		20
4	4431	Britannia Rd	8		450
4	211	Massie Rd	8		350
4	400	Marx	8	298	298
4	100	E 5th St	15	29	29
4	100	E 1st St	45	30	30
5	2700	Stratford Rd	8	57	57
5	2700	Stratford Rd	8	193	193
5	2700	Stratford Rd	8	55	55
5	2700	Stratford Rd	8	193	193
5	2700	Stratford Rd	8	194	194
5	3228	Kensington Ave	12	35	
5	1100	Balding St	12		290
5	3600	BEATTIE	6		20
5	900	ADMIRAL GRAVELY BLVD	6		40
6	3329	Cooper St	8		216
6	3343	Warner Rd	8		316
6	2200	Hildreth St	12		210
6	3302	MARYLAND AVE	8		525
6	2815	NORTH AVE	6		200
6	3301	MARYLAND AVE	8		500
7	3600	Brook Rd	8	51	51
7	3900	W Grace St	10	410	410
7	4900	Goddin Ct	12	32	32
7	4900	Goddin Ct	12	218	218
8	3200	N 1st St	12	450	450
8	400	N Sheppard St	12	141	141
8	400	N Sheppard St	12	177	177
8	2809	MIDLOTHIAN TPK	6	90	
8	3215	LOGANDALE AVE	6	52	
8	2600	Lynhaven Ave	8		281
8	3700	Sunora Dr	8		470
8	2800	North Ave	8		6
8	3440	Delaware Ave	8		550
8		YORKTOWN & LYNHAVEN	8		200
8	2719	CHAMBERLAYNE AVE	12		270
8	600	Hull St	8	283	283
8	300	Hull St	24	50	50
11	300	2nd Ave alley	12	461	461
11	600	N Belmont Ave	66	18	
11	3218	W FRANKLIN ST	6	115	
11	3300	Meadowbridge	8		530
11	5400	Kendall Rd	6		360
11	3600	BRANCHWOOD DR	8		218

YEAR: 2013

MONTH: March

DATE	BLOCK	LOCATION	PIPE SIZE	SEWER LENGTH (FT)	
				TELEVISED	CLEANED
11	4100	SILBURY	8		80
12	2200	Gordon Ave	15	380	380
12	2823	Grove Ave	6	24	
12	1007	N 21ST ST	6	60	
12	5434	Kendall Rd	6		6
13	2100	Whitcomb St	8	219	219
13	3600	Brook Rd	8	110	110
13	3600	Brook Rd	8	54	54
13	3401	Carolina Ave	8		560
13	2303	BARTON AVE	8		200
14	2100	Whitcomb St	8	354	354
14	600	Roseneath	15	196	196
14	3200	W Franklin St	12	59	59
14	1723	ROADMILLER RD	6	115	
14	212	W MAIN ST	6	80	
14	1810	WESTMORELAND	6	36	
14	3201	Carolina Ave	8		300
14	100	Victor Ave	8		12
14	3201	Carolina Ave	8		550
14	600	POLLOCK ST	8		150
14	3705	CRUTCHFIELD ST	8		300
15	5200	Scott St	8	50	50
15	1100	W Laburnum Ave	8	49	49
15	3200	Noble Ave	12	17	17
15	1100	W Laburnum Ave	24	88	88
15	102	Matoaka St	6	12	
15	5005	BROMLEY LN	6	89	
15	3401	Maryland Ave	6		320
15	3301	Maryland Ave	8		350
15	316	E 17TH ST	8		206
18	200	W 12th St	20	402	402
18	1200	Porter St	24	303	303
18	3201	Burns Ave	8		395
18	2700	MECHANICSVILLE TNPK	12		250
18	2303	BARTON AVE	8		200
19	5100	W Cary Street Rd	15	196	196
19	2200	Maury St	21	259	259
19	3607	EDGEWOOD AVE	6	22	
19	3223	Enslow Ave	8		320
19	2309	Barton Ave	8		179
19	3827	Hawthorne Ave	8		319
19	3827	HAWTHORNE AVE	6		60
20	1500	Mechanicsville Tpk	15	186	186
20	300	Jefferson Davis Hwy	30	443	443
20	300	Jefferson Davis Hwy	30	9	9
20	2000	Maury St	42	208	208
20	2038	MOORE ST	6	24	
21	10	W Lancaster St	12	3	3
21	1000	Woodhaven Rd	24	361	361
21	1000	Woodhaven Rd	24	346	346
21	3520	MISSOURI AVE	6	30	
21	3019	KENMORE RD	8		300
22	3900	Chamberlayne Ave	10	67	67
22	700	E Franklin St	30	244	244
22	Nichols	E Main St	6	60	
22	3520	MISSOURI AVE	6	11	
22	1100	CARLISLE AVE	6	20	

YEAR: 2013

MONTH: March

DATE	BLOCK	LOCATION	PIPE SIZE	SEWER LENGTH (FT)	
				TELEVISED	CLEANED
22	4101	Piney Rd	8		1069
22	1538	Mechanicville Tpk	12		230
22	3804	Noble Ave	6		350
22	3812	Noble Ave	6		300
22	3520	MISSOURI AVE	6		30
24	3309	Barton Ave	6	30	
25	4101	PINEY RD	6	21	
26	2700	Chamberlayne Ave alley	8	145	145
26	2100	Chicago Ave	30	326	326
26	2000	Floyd Ave	42	389	389
26	3128	ELLWOOD AVE	6	81	
26	1818	N 22ND STREET	6	37	
27	2600	Courtland St	12	185	185
27	2600	Courtland St	12	178	178
27	2600	Courtland St	12	399	399
27	2600	Courtland St	12	50	50
27	100	W Lancaster St	12	220	220
27	3300	Cutshaw Ave	36	319	319
27	273	SOUTHGATE ST	6	13	
27	3301	2nd Ave	8		495
28	100	W Franklin St	8	12	12
28	1401	NATIONAL ST	6	46	
28	2303	BARTON AVE	6	20	
				12393	24588

CITY OF RICHMOND, VIRGINIA
DEPARTMENT OF PUBLIC UTILITIES
NINE MINIMUM CONTROLS REPORT

MONTHLY
SEWER TV/CLEANING REPORT

YEAR: 2013MONTH: April

DATE	BLOCK	LOCATION	PIPE SIZE	SEWER LENGTH (FT)	
				TELEVISED	CLEANED
1	3800	Claremont ave	8	350	350
1	3800	Seminary Ave	12	274	274
1	3800	Seminary Ave	12	287	287
1	3800	Seminary Ave	12	175	175
2	4000	MacArthur Ave	8	367	367
2	100	E 14th St	63	395	
2	3212	Landria Dr	8		410
2	2001	Barton Ave	6		80
2	3800	Claremont ave	8		169
2	605	HANCOCK ST	6	32	
3	700	W 24th St	15	351	351
3	2800	Fendall Ave	33	551	551
3	3700	Hopkins Rd	8	75	
3	6956	Old Westham Rd	8	89	
3	3901	Seminary Ave	8	204	
3	2001	JUNALASKA CT	6	69	
4	3200	Landria Dr	8	388	388
4	5206	West Cliff ave	12		200
4	3502	West Cliff Ave	8	106	
4	132 1/2	E MAIN ST	6	10	
4	1611	LAMB AVE	6	10	
5	2001	Barton ave	8	66	
5	2001	Barton ave	8	66	
5	1705	CARTER ST	6	22	
5	2719	MIDLOTHIAN TPKE	6	29	
5	937	DERRYMORE RD	6	20	
8	2038	W Moore st	8		55
8	2001	Barton Ave	6		93
8	2038	W. Moore St	18	23	
8	3401	Ellsworth Rd	8	224	
8	0	E 35TH STREET	6	63	
8	2412	BUFORD AVE	6	40	
9	2825	Garland Ave	8		505
9	2803	Montrose ave	8		339
10	2710	2709 susten St	6		50
10	6313	Ridgeway Rd	8		550
10	3403	Maplewood Ave	8		180
10	4901	MONUMENT AVE	6	8	
11	6331	Ridgeway Rd	8	232	
11	3311	MIKE RD	6	20	
11	2601	W GRACE ST	6	88	
11	634	HOLLY ST	6	66	
11		E MAIN & ORLEANS	6	20	

YEAR: 2013

MONTH: April

DATE	BLOCK	LOCATION	PIPE SIZE	SEWER LENGTH (FT)	
				TELEVISED	CLEANED
12	4716	Patterson ave	8	166	
12	1621	MECHANICSVILLE TPKE	6	32	
12	503	S RONDOLPH ST	6	26	
15	4604	W FRANKLIN ST	6	24	
15	1724	CLAIBORNE	6	30	
15	711	ST CHRISTOPHERS RD	6	93	
16	708	ST CHRISTOPHERS RD	6		100
16	4604	W FRANKLIN	6		30
16	3325	HOPKINS RD	6		30
16	1724	CLAIBORNE	6	28	
17	3061	Old Warwick Rd	6		80
17	2014	Hanover Ave	12	87	
17	2915	W Grace St	16 X 24	324	
18	3900	Seminary Ave	8	206	206
18	3900	Seminary Ave	10	451	451
18	7525	Rockfalls Dr	8	275	
18	1306	Overbrook rd	8	388	
19	3900	Seminary Ave	8	39	39
22	515	N ADAMS	6		30
22	4032	Mac Arthur Ave	8	154	
23	2600	Floyd Ave	18	59	59
23	6724	Patterson Ave	8		440
23	6724	Patterson ave	8	388	
24	4900	Chamberlayne Ave alley	8	182	182
24	4900	Chamberlayne Ave alley	8	371	371
24	4901	Monument Ave	6		15
24	2400	Royall Ave	12		550
24	2409	Royall Ave	8	280	
25	3500	Kensington	12	432	432
25	500	Hull St	12	283	283
25	300	Hull St	12	527	527
25	200	E 14th St	66	258	
25	3000	W Broad St	120	198	
25	8321	West Wayburn St	8	705	
26	1618	DECATUR ST	6		20
26	300	Albemarle Ave	8	377	
29	300	Albemarle Ave	8	56	
30	3901	WAKEFIELD RD	8		550
30	4709	GRANDWAY RD	8		200
				11159	9969

CITY OF RICHMOND, VIRGINIA
DEPARTMENT OF PUBLIC UTILITIES
NINE MINIMUM CONTROLS REPORT

MONTHLY
SEWER TV/CLEANING REPORT

YEAR: 2013

MONTH: May

DATE	BLOCK	LOCATION	PIPE SIZE	SEWER LENGTH (FT)	
				TELEVISED	CLEANED
1	11th	Broad sty	12	87	
1	10	E Grace sty	8	30	30
1	100	E Grace sty alley	8	37	37
2	2000	Kansas Ave	36	311	311
3	4629	Kensington aver	8	226	
3	122	W 33rd St	12	111	
3	5711	HULL ST	8		100
3	2600	Edgewood Ave	49	460	460
6	211	Massie rd	6	35	
6	3200	Brook Rd	15	221	221
6	3200	Brook Rd	15	291	291
6	1600	Mechanicsville Tpk	33	40	40
6	1600	Mechanicsville Tpk	33	560	560
7	4000	Blk of MacArthur Ave	8		705
7	2000	Moore St	15	260	260
7	1800	Monument Ave alley	15	438	438
8	515	N Adams St	8	50	
9	1823	Idlewood aver	12	168	
9	4500	North Ave	8	147	
10	1600	N 19th	18	126	
10	3600	Brook Rd	54	575	575
13	1018	Cleveland sty	12	180	
14	2308	E Grace sty	8	46	
14	1800	Idlewood aver	12	190	190
14	100	S 1st St	15	48	48
14	10	E Cary St	20x30	123	123
15	3100	Cofer rd	8		250
15	2900	Cofer rd	8		350
15	3300	Cofer rd	8		473
15	3216	Pollock St	4		10
15	10	E Grace sty	8	49	49
15	1800	Texas Ave	24	357	357
16	4101	Canterbury St	8	468	
16	3205	1st Ave	8		350
16	102	Canterbury St	8		435
16	Canterbury	Massie St	8		400
16		East Quarry	36	840	840
17		East Quarry	18	840	840
17	300	Hull	21	50	50
17	300	Stockton St	30	45	45
17	402	Hunt Ave	8	247	
17	2800	Cofer rd	8		450
17	3205	1st Ave	8		350
17	402	Hunt aver	8		400
20	5703	Orcutt Lane	4		30
20	205	Birkshire sty	8		240
20	2200	Broad Rock sty	4		150
20	2200	Broad Rock sty	8		350
21	808	Circlewood dry	8	276	
22	808	Newkirk Dr	8	243	
22	7th	Cary St	16 X 24	7	
22	808	New Kirk Dr	8		340
22	1800	Kansas Ave	24	300	300
22	1800	Kansas Ave	30	155	155

YEAR: 2013

MONTH: May

DATE	BLOCK	LOCATION	PIPE SIZE	SEWER LENGTH (FT)	
				TELEVISED	CLEANED
22	1900	Kansas Ave	30	149	149
24	1100	Ingram Ave	18	22	22
24	1100	Ingram Ave	24	30	30
24	1100	Ingram Ave	24	223	223
28	4400	North Ave	8	141	
28	4400	North Ave	8		160
28	2213	Cullen Rd	8		500
28	2215	Cullen Rd	6		10
28	600	W 24th St	15	361	361
28	2400	Stonewall Ave	18	361	361
28	1100	Ingram Ave	30	386	386
28	1100	Ingram Ave	30	32	32
29	4306	Ashlawn Dr	8	279	
29	1005	GREENWAY LN	6	70	
29	3228	HANOVER AVE	6	32	
29	304	Robinson St	6		15
29	4307	N Ashlawn St	8		290
29	4313	N Ashlawn St	8		400
29	4315	S Ashlawn St	8		380
29	100	W Cary St	16x24	26	26
30	801	Newkirk Dr	24	81	
30	15th	Boston Ave	8	319	
30	2710	CHEATHAM ST	6	5	
30	4617	W FRANKLIN ST	6	30	
30	801	New Kirk Dr	24		700
30	3100	Chesco Rd	8		350
31	4629	Kensington aver	8	226	
31	5412	Tuckahoe aver	12	37	
31	4400	Brookshire Dr	8		174
31	100	Texas Ave	16x24	232	232
				11679	16404

CITY OF RICHMOND, VIRGINIA
DEPARTMENT OF PUBLIC UTILITIES
NINE MINIMUM CONTROLS REPORT

MONTHLY
SEWER TV/CLEANING REPORT

YEAR: 2013MONTH: June

DATE	BLOCK	LOCATION	PIPE SIZE	SEWER LENGTH (FT)	
				TELEVISED	CLEANED
1	10	S Auburn Ave	8	17	
1	424	Granite Ave	8		709
1	328	Granite Ave	8		710
1	5700	Grove ave	8		425
1	521	Granite Ave	8		550
1	500	Granite Ave	8		205
3	3711	Crutchfield st	8	316	
3	2601	W GRACE ST	6	50	
3	2602	COLUMBIA ST	6	100	
3	3706	Crutchfield	8		430
4	5616	Heywood Rd	8	312	
4	5610	GROVE AVE	6	60	
4	3201	Park ave	10		180
4	1311	Bellevue Ave	12		490
4	2600	BERWYN	15		550
4	400	Tilden St	39	397	397
5	1431	Carlise ave	8	251	
5	5200	Brook rd	6	40	
5	1431	Carlise Ave	8		46
5	5612	Grove ave	8		310
5	2117	Clearfield Rd	8		390
5	1723	ROADMILLER RD	6		85
5	3100	Noble Ave	36	232	232
5	3200	Noble Ave	36	282	282
5	3200	Noble Ave	36	323	323
6	310	E BROAD ST	6	25	
6	312	N SHEILDS AVE	6	65	
6	3600	Brook Rd	10	50	50
6	1000	Blanton Ave	18	316	316
6	3200	Noble Ave	36	284	284
7	3010	W LEIGH ST	6	70	
10	3414	Maryland Ave	6	80	
10	59	W 27th	6	60	
10	1309	AMHERST AVE	6	10	
10	5700	SNEAD RD EASEMENT LINE	8		650
11	631	CIRCLEWOOD AVE	6	16	
11	4115	STUART AVE	6	83	
11	4306	S ASHLAWN DR	6	20	
11	3200	Noble Ave	12	489	489
12	2805	Claredon lane	8		205
12	59	W 27th st	8		150
12	301	GRANITE AVE	8		450
12	400	GRANITE AVE	8		400
12	500	GRANITE AVE	8		500
13	307	Roseneath Rd	6	24	
13	2100	Cary st	15		345

YEAR: 2013

MONTH: June

DATE	BLOCK	LOCATION	PIPE SIZE	SEWER LENGTH (FT)	
				TELEVISED	CLEANED
13	2309	P STREET	12		300
13	200	Gun Club Rd	8	102	102
13	200	N SHEILDS AVE	12	223	223
14	2122	W Cary St	8	93	
14	3604	Maryland Ave	6	42	
14	800BLK	BRAMWELL	8		400
14	100	Poe St	12	158	158
16	1051	Boroughbridge Rd	6	26	
17	3316	Hanover Ave	6	32	
17	2222	HILDRETH ST	6	22	
17	4800	Warwick Rd	8		350
17	N 23rd	T St	12		250
17	23	Willway Rd	8		450
17	23	NORTH ST	12		230
18	#18	Willway Ave	8	350	
18	1815	National St	6	36	
18	4627	Jervie dr	8		430
18	3001	Dorset Ave	8		485
18	4412	Pettus Rd	8		550
18	3000	DORSET RD	8		485
18	5300	E Marshall St	16x24	47	47
19	4000	Fitzhugh Ave	12	16	
19	3021	Landria Dr	6	109	
19	4412	PETTUS RD	8		350
19	500	Randolph Rd	48	117	117
19	600	E Main St. Alley	12x18	99	99
20	4600	Jervie Dr	8	615	
20	916	Irby Dr	6	40	
20	2925	BROOK RD	6	30	
20	1201	RENNIE AVE	6	30	
20	3311	DELEWARE AVE	6	82	
20	612	ALBEMARLE AVE	6	43	
20	3550	Clydewood rd	8		480
20	3521	Clydewood rd	8		510
20	3530	CLYDWOOD	8		480
20	6400	Balsam Rd	8	262	262
20	6400	Balsam Rd	8	262	262
20	600	Holly St	24	165	165
20	600	Holly St	24	104	104
21	2904	W Grace St	6	20	
21	3550	Clydewood Ave	6	15	
21	4617	W franklin St	6	20	
21	3608	EDGEWOOD AVE	6	35	
21	3445	Clydewood rd	8		540
21	3420	Clydewood rd	8		530
21	2202	NORTHUMBERLAND	6		30
21	2600	Edgewood Ave alley	49	464	464
22	1713	Kemper st	6	20	
24	3702	Ferapont Dr	6	70	
24	6824	Eveglades Dr	6	20	
24	4215	HOPKINS RD	6	155	
24	1723	ROADMILLER RD	6		45
25	17	S LOMBARDY	6	31	

YEAR: 2013MONTH: June

DATE	BLOCK	LOCATION	PIPE SIZE	SEWER LENGTH (FT)	
				TELEVISED	CLEANED
25	1018	FAYE ST	6	60	
25	4600	Walmsley Blvd	8		445
25	4700	Walmsley Blvd	8		500
26	6832	MIDLOTHIAN TPKE	6	30	
26	949	Kingsway Rd	8		705
26	1000	Kingsway Rd	8		300
27	3318	Patterson Ave	12	244	
27	801	St Christopher Lane	6	31	
27	2107	5TH AVE	6	120	
27	900	3rd St	12		270
27	3318	Patterson ave	24		370
27	4400	Walmsley Blvd	8		500
28	7121	Cherokee rd	6	45	
29	3414	Meadowbridge rd	6	34	
29	1400	Brander st	15		450
				8491	22591

CITY OF RICHMOND, VIRGINIA
DEPARTMENT OF PUBLIC UTILITIES
NINE MINIMUM CONTROLS REPORT

MONTHLY
SEWER TV/CLEANING REPORT

YEAR: 2013MONTH: July

DATE	BLOCK	LOCATION	PIPE SIZE	SEWER LENGTH (FT)	
				TELEVISED	CLEANED
1	4000	W Franklin St	21	309	309
1	5000	W Franklin St	36	216	216
1	524 1/2	S Pine St	6	97	
1	4607	W FRANKLIN	6	25	
1	5265	PINECREST AVE	6	66	
1	6734	KENSINGTON AVE	6	35	
1	Auburn St	between Cary & Main St	8		41
2	10	Tapoan Rd	8	139	139
2	3300	W Grace St	24	491	491
2	2101	5th Ave	8		250
2	2101	5th Ave	8		240
3	527	NORTHSIDE AVE	12		400
5	5367	BRYCE LN	6	90	
8	804	Erich Rd	6	65	
8	1900	N 19th St	6	32	
8	4820	Old Warwick Rd	6	25	
8	2105	Lamb Ave	6	40	
8	3521	MONTROSE AVE	6	4	
8	2105	LAMB AVE	6	68	
8	900	Byswick Lane	8		200
8	636	Byswick Lane	8		535
8	1000	Byswick Lane	8		150
8	Tilford	Byswick Lane	8		300
9	2800	Hawthorne Ave	78	322	
9	3521	MONTROSE AVE	6	116	
9	903	Faye St	8		350
9	Stoney run	Government Rd	12		160
9	829	Faye St	8		380
9	903	Faye St	8		530
9	647	Faye St	8		555
9	927	Faye St	8		400
10	3023	Laurelbrook Dr	8	154	
10	3101	Laurelbrook Dr	8	98	
10	400	Adams St	6	20	
10	3317	FLORIDA AVE	6	15	
10	Tilford	Byswick Lane	8		550
10	Tilford	Faye St	8		545
10	3403	MOSS SIDE AVE	8		200
11	200	Berkshire Rd	8	459	
11	1708	Carter st	10		30
11	1708	Carter st	12		311
12	100	N Lombardy St	12	72	72
12	200	Roseneath Rd	24x36	220	220
12	3206	Landria Dr	8	396	
12	2950	Poyntelle Rd	6	40	

YEAR: 2013

MONTH: July

DATE	BLOCK	LOCATION	PIPE SIZE	SEWER LENGTH (FT)	
				TELEVISED	CLEANED
12	1735	CLAIBORNE ST	6	17	
12	Dover	Berkshire Dr	8		350
12	201	Berkshire Dr	8		188
12	208	Berkshire Dr	8		240
14	6955	Navaho Rd	6	20	
15	800	E 21st	36	358	358
15	1700	Dunbarton Rd	42	390	
15	700	Faye St	10	269	
15	600	Faye st	10	269	
15	1902	Wilmington Ave	6	30	
15	718	N 35TH	6	89	
15	610	Arnold Ave	8		280
16	500	Byswick Lane	10	344	
16	600	Byswick Lane	8	177	
16	600	Byswick Lane	8	367	
16	700	Byswick Lane	8	288	
16	4606	W FRANKLIN	6	30	
17	3000	Culver Rd	8	316	
17	1500	Bangle dr	8	346	
17	3000	Culver rd	8		370
17	3018	Culver rd	8		360
17	1560	Bangle Rd	8		410
17	1401	Bangle Rd	8		390
18	1810	Gordon Ave	6	43	
18	3000	Hidden Dr	8		340
18	3016	Hidden Dr	8		340
18	600	600 HENRI & WESLEY	8		460
18	6160	BAY ST	8		480
18	6105	WESLEY RD	8		360
18	2410	HANOVER AVE	12		350
18	300	Harrison	42		183
19	4606	W Franklin St	6	27	
19	1803	CLAIBORNE ST	6	23	
19	1514	PALMYRA AVE	6	34	
19	1514	BELLEVUE AVE	6	46	
19	2103	LAMB AVE	6	72	
20	2404	HAWTHORNE AVE	6	20	
20	2925	SPRINGVIEW DR	6	40	
21	1405	Minnefee	6	32	
22	1500	Victor St	36	174	174
22	2200	Cedar Rd	12x24	131	131
22	1600	Talbert Dr	8	248	
22	1500	Talbert Dr	8	243	
22	600	Strawberry St	8	209	
22	3728	BROOKSIDE RD	6	83	
22	3502	FLORIDA AVE	6	27	
22	111	E Belt Blvd	6		110
23	2300	Hermitage Rd	78	116	
23	3100	Kenyon Ave	8	118	
23	1400	Talbert Dr	8	187	
23	3100	Lost Lane	8	354	
23	3200	Kenyon Ave	8	309	

YEAR: 2013MONTH: July

DATE	BLOCK	LOCATION	PIPE SIZE	SEWER LENGTH (FT)	
				TELEVISED	CLEANED
23	6520	WORTHINGTON	8		250
23	6340	WORTHINGTON	8		350
23		MCDOWELL & WORTHINGTON	8		330
24	3200	Lawson St	18	309	309
24	10000	Twin Valley Rd	24	99	99
24	400	Harrison	48		403
24	100	19th Street	60	408	
25	100	19th Street	60		408
25	5000	Brook Rd	42	113	
25	5000	Brook Rd	60	551	
26	1813	MONTIERO ST	6		200
26	10	19th Street	60		420
27	1500-1700	Marshall	60	534	
29	1900	Ruffin Rd	12		489
29	1800	Ruffin Rd	12		409
29	5401	TROY RD	8		200
30	1100	Libbie Ave	8		540
30	1331	Evert St	8		390
30	600	W 26TH	6		30
31	200	Gun Club Rd	8	284	284
				11758	18559

CITY OF RICHMOND, VIRGINIA
DEPARTMENT OF PUBLIC UTILITIES
NINE MINIMUM CONTROLS REPORT

MONTHLY
SEWER TV/CLEANING REPORT

YEAR: 2013MONTH: August

DATE	BLOCK	LOCATION	PIPE SIZE	SEWER LENGTH (FT)	
				TELEVISED	CLEANED
1	10	Broad Rock Blvd	8	210	210
1	10	Amphill Rd	8	210	210
1	100	19th St	30	100	100
2	600	E Main St alley	12x18	99	99
2	600	E Main St alley	12x18	160	160
3	2405	Kensington Ave	6	45	
5	4611	Radford Ave	6	45	
5	1506	Winder St	8		340
5	1141	Eggeston St	8		340
5	1108	Eggeston St	6		340
5	500	Shafer St	12	17	17
6	1000	W Main St	12	200	200
8	1403	Winder St	6		50
8	600	Strawberry St	12	125	125
8	2300	W Grace St alley	12	542	542
9	1811	Monterio Ave	6		340
9	1811	Monterio Ave	6		150
9	1800	HOPKINS RD	8		209
9	2000	HOPKINS RD	8		400
9	3400	DEERWOOD	12		1140
9	300	Tilden St	24x36	351	351
9	1900	T St	30	346	346
10	2000	Marshall	60	188	
10	2000	Marshall	60	170	
10	1900	Marshall	60	183	
10	1900	Marshall	60	151	
10	1900	Marshall	60	175	
10	1800	Marshall	60	159	
10	1800	Marshall	60	81	
10	1800	Marshall	60	59	
10	1700	Marshall	60	204	
10	1700	Marshall	60	18	
10	1600	Marshall	60	74	
10	1600	Marshall	60	356	
10	1500	Marshall	60	33	
10	1500	Marshall	60	65	
10	1500	Marshall	60	7	
12	3000	LYNHAVEN AVE	8		525
12	300	Tilden St	24x36	88	88
12	1200	Rennie Ave	42	752	
13	3521	CLYDWOOD	6		510
13	316	E 17TH ST	8		250
13	3300	E Marshall St	16x24	41	41
13	10	Broad Rock Blvd	42	137	
13	2600	Cary St	8	25	
14	5007	BROOK RD	8		209
14	3412	REYBURN RD	12		350
14	2000	W Grace St alley	20	317	317
14	5800	Guthrie Av	24	138	138
14	5800	Guthrie Av	24	97	97

YEAR: 2013

MONTH: August

DATE	BLOCK	LOCATION	PIPE SIZE	SEWER LENGTH (FT)	
				TELEVISED	CLEANED
14	5800	Guthrie Av	24	270	270
14	5800	Guthrie Av	24	195	195
15	3451	Keighly ST	12		1228
15	3400	Keighly ST	12		330
15	3418	Keighly ST	12		363
15	3407	REYBURN RD	12		450
15	3400	REYBURN RD	12		440
16	5700	Park Ave	8	262	262
16	3200	Kensington Ave	12	373	373
20	2902	4TH AVE	8		520
20	3324	MIKE RD	8		300
20	3310	MIKE RD	8		250
20	1300	E Cary St	8	260	260
20	400	Strawberry St	12	254	254
21	2208	E Broad st	6	106	
21	3317	MIKE RD	8		250
21	3306	MIKE RD	8		350
21	3325	MIKE RD	8		350
21	1806	CLEMSON	8		350
21	2223	W.BROAD ST	12		850
21	4000	Fitzhugh Ave	15	268	268
21	3200	Maryland Ave	24	279	279
21	3200	Maryland Ave	24	281	281
21	4900	Stockwood Rd	24	205	205
22	2600	MECHINALY	6		40
22	3313	FRANK RD	8		280
22	1900	CLEMSON RD	8		580
22	3600	Brook Rd	10	240	240
22	4400	Monument Ave	27	334	334
23	1130	MEADE ST	8		260
23	6400	Roselawn Ave	8	205	205
23	5700	Grove Ave	8	197	197
23	5700	Grove Ave	8	189	189
26	1307	N 21st	6	20	
26	3408	FRANK RD	8		530
26	2800	CHANNING AN CLARENDON	8		700
26	9705	WEYMOUTH DR	8		220
26		WEYMOUTH AND CHANNING	8		250
26	2819	WEYMOUTH DR	6		280
26	2200	CULLEN RD	8		700
26	2100	ALLWOOD AVE	8		460
27	4600-4700	COOK RD	8		450
27		BANNISTER LN AND WESTGATE	6		700
27	9400	CHANNING AND	8		10
27	1400	Carlsile Ave	8	249	249
27	3000	Marlboro St	12	174	174
27	2300	E. Main St.	42	268	268
27	2300	E Main St.	42	62	62
27	0	N 23rd St.	24	235	235
28	0	N 21st St.	12	200	200
28	0	N 23rd St.	24	336	336
28	1307	N 33rd st	6	32	
28	5017	E Seminary Ave	6	40	
28	3600	E Broad st	6	47	
28	3400	Brook Rd	12	1	1
28	200	Bland St	12	62	62
28	200	Bland St	12	213	213

YEAR: 2013MONTH: August

DATE	BLOCK	LOCATION	PIPE SIZE	SEWER LENGTH (FT)	
				TELEVISED	CLEANED
28	1300	Bellevue Ave	15	321	321
29	3100	Cliff Ave	8	341	341
29	4100	Pawnee Rd	8	195	195
29	300	Porter St	15	352	352
30	3600	Chamberlayne Ave	18	546	546
30	3600	Chamberlayne Ave	18	183	183
30	4700	Patterson Av	8	443	
				14206	27235

CITY OF RICHMOND, VIRGINIA
DEPARTMENT OF PUBLIC UTILITIES
NINE MINIMUM CONTROLS REPORT

MONTHLY
SEWER TV/CLEANING REPORT

YEAR: 2013MONTH: September

DATE	BLOCK	LOCATION	PIPE SIZE	SEWER LENGTH (FT)	
				TELEVISED	CLEANED
2	3105	Hawthorne Ave	6	96	
3	3605	Brook Rd	6	20	
3	19	W Leigh St	6	26	
3	3300	Cullen Rd	8	450	
3	4500	Broad Rock Blvd	8	250	
3	3300	5th Ave	12		312
3	3300	Detroit Ave	8		538
3	7600	Cherokee Rd	8	222	222
4	4611	Radford Ave	6	58	
4	3191	Zion St	6	20	
4	1703	Seddon Rd	6	26	
4	Irby Dr	Westower	8		111
4	300	Harrison	30	160	
4	2400	Main	36	330	
4	400	Tilden St	39	400	400
5	301	College St	6	35	
5	1600	Alaska Dr	8	250	
5	1800	Alaska Dr	8	580	
5	1700	Alaska Dr	8	350	
5	3237	Cullen Rd	8	60	
5	100	Virginia St	12	73	73
5	100	Virginia St	12	24	24
5	100	Virginia St	12	45	45
5	100	Virginia St	12	13	13
6	1703	Seddon Rd	6	10	
6	1118	Whitehead Rd	6	18	
6	4414	Monument Ave	6	88	
6	1600	Decatur St	6	100	100
6	1700	Seddon Rd	8	92	92
10	521	Southside Plaza	8	260	
10	1400	Brander St	15	80	
10	1321	Mechanicsville Tpk	12	159	
10	200	Carnation St	8	261	261
10	3900	W Weyburn Rd	8	75	75
10	3000	Norfolk St	12	5	5
11	2816	Dupont cir	6	23	
11	Glyndon Lane	Woodberry	8	1175	
11	4300	Stuart Ave	8	146	146
11	10	N Allen Ave	12	50	50
11	2500	Kensington Ave	15	394	394
12	725	Boroughbridge Rd	6	18	
12	1619	Kingswood	8	320	
12	1701	Kingswood	8	320	
12	1600	Kingswood	8	310	
12	100	E 35th St	8	31	31
13	1519	Kingswood	8	500	
13	1430	Kingswood	8	450	
13	1400	Kingswood	8	400	
13	3900	W Grace St	10	850	
13	2400	Semmes Ave	12	30	30
13	2400	4th Ave	20	320	320
13	2200	Stuart Ave	24x36	400	400
16	1718	Catalina Ave	8	400	

YEAR: 2013

MONTH: September

DATE	BLOCK	LOCATION	PIPE SIZE	SEWER LENGTH (FT)	
				TELEVIEWED	CLEANED
16	4501	Kelnor Dr	8	380	
16	1746	Catalina Ave	8	365	
16	2816	Dupont Cir	8	66	
16	6330	Glyndon Dr	8	509	
16	2600	Rettig Rd	8	500	
17	907	Bramwell Rd	6	10	
17	1700	Catalina Ave	8	400	
17	1618	Catalina Ave	8	400	
17	Clarkson	Catalina Ave	8	400	
17	1509	Catalina Ave	8	500	
17	1500	Catalina Ave	8	200	
17	6530	Forest Hill Ave	8	350	
17	6200	Glyndon Dr	8	350	
17	4117	Mc Kay Ave	8	330	
17	4100	Mc Kay Ave	8	325	
17	2300	Heath Ave	8	475	
17	4029	Mc Kay Ave	8	325	
17	3500	Cedar Grove Rd	8	390	390
17	4000	Cutshaw Ave	12	287	287
17	3400	Deerwood Rd	12	338	338
18	705	Spottswood Rd	6	24	
18	509	Bancroft Ave	6	75	
18	105	W Jackson	12	250	
18	1000	Libbie Ave	8	173	173
18	1900	Carter St alley	8	204	204
18	1000	Libbie Ave	15	306	306
18	300	E Ladies Mile Rd	21	311	311
18	300	E Ladies Mile Rd	21	91	91
19	4201	Leake Ave	8	165	
19	4100	Mc Kay Ave	8	532	
19	4135	Leake Ave	8	402	
19	3114	Bute Lane	8		300
19	4500	North Ave	8	335	335
19	2800	Dupont Circle	10	253	253
20	4126	Leake Ave	8	400	
20	4100	Leake Ave	8	280	
20	3100	Sunset Ave alley	8	92	92
23	2709	Hanes Ave	8		480
23	500	Bancroft Ave	8	25	25
23	6400	Roselawn Ave	8	205	205
23	6400	Roselawn Ave	8	207	207
24	936	Greenridge Dr	6	69	
24	510	Belt Blvd	6	52	
24	2624	Glyndon Dr	8	405	
24	2918	Chamberlayne Ave	6	76	
24	3900	W Grace St	10	413	413
24	4400	Monument Ave	12	337	337
24	4400	Monument Ave	27	334	334
24	1200	Kent Rd	36	76	76
24	1200	Kent Rd	36	181	181
24	1200	Kent Rd	36	131	131
25	2918	Chamberlayne aver	6	56	
25	418	N Mulberry St	6	61	
25	2621	Rettig Rd	6	31	
25	2800	Dupont Cir	72	120	
26	2916	Chamberlayne Ave	24	300	
26	2918	Chamberlayne Ave	6	60	
26	3600	Catalpa Ave	8	328	328
26	6400	Roselawn Ave	8	167	167
26	5700	Grove Ave	8	197	197

YEAR: 2013MONTH: September

DATE	BLOCK	LOCATION	PIPE SIZE	SEWER LENGTH (FT)	
				TELEVISED	CLEANED
27	3224	Blithewood Rd	8	400	
27	3200	Blithewood Rd	8	450	
27	3109	Blithewood Rd	8	950	
30	902	Decatur St	6	60	
30	1662	Rosecrest St	8	100	
30	700	Boroughbridge Rd	24	380	380
				27737	10183

CITY OF RICHMOND, VIRGINIA
DEPARTMENT OF PUBLIC UTILITIES
NINE MINIMUM CONTROLS REPORT

MONTHLY
SEWER TV/CLEANING REPORT

YEAR: 2013MONTH: October

DATE	BLOCK	LOCATION	PIPE SIZE	SEWER LENGTH (FT)	
				TELEVISED	CLEANED
1	5718	Heywood Rd	6	40	
1	1600	Rosecrest Ave	8	107	107
1	2200	Warwick Ave	12	237	237
2	4157	Walmsley Blvd	6	135	
2	705	Spottwood Rd	6	32	
2	2300	Piney Way Lane	8		350
2	800	Woodstock Rd	8		525
2	1000	Woodstock Rd	8		380
2	1021	Woodstock Rd	8		380
2	5300	Jarvis Rd	8		500
2	5400	Jarvis Rd	8		380
2	717	Yorkshire Rd	8		400
2	5500	Jarvis Rd	8		233
2	600	S Pine St	16x24	91	91
3	4820	Old Warwick Rd	6	15	
3	3335	Blithewood Rd	8		230
3	3504	Blithewood Rd	8		400
3	3500	Jarvis Rd	8		440
3	Jarvis	Yorkshire Rd	8		240
3	3100	Sunset Ave alley	8	84	84
3	3100	Sunset Ave alley	8	111	111
4	2703	E Clay St	6	32	
4	900	Rosemont	8		400
4	1700	Summit Ave	20	344	344
4	2800	Hermitage Rd	66	505	
5	4307	Silbury Rd	6	8	
7	1000	Forest View Dr	8	265	265
7	1000	Forest View Dr	8	67	67
7	900	Forest View Dr	12	55	55
7	900	Forest View Dr	12	76	76
7	10	N Rowland St	15	225	225
8	1000	S Belmont Ave	8	13	13
8	3000	Laurelbrook Rd	12	161	161
9	4300	Silbury Rd	8	355	355
9	1100	S Meadow St alley	12	216	216
10	500	W 21st St	12	94	94
10	1100	Carrolton St	15	152	152
10	1100	Carrolton St	15	463	463
11	4300	W Grace St	8	267	267
11	6500	Wessex Dr	12	324	324
11	3500	Kensington Ave	12	65	65
14	4813	Chamberlayne Ave	8		274
14	Azalea Ave	Chamberlayne Ave	8		380
14	1000	Azalea Ave	8		375
14	5000	E Seminary Ave	8		450

YEAR: 2013

MONTH: October

DATE	BLOCK	LOCATION	PIPE SIZE	SEWER LENGTH (FT)	
				TELEVISED	CLEANED
14	4900	E Seminary Ave	8		540
14	4911	Chamberlayne Ave	8		364
14	3100	Greyland Ave	48	313	313
15	4800	E Seminary Ave	8		75
15	4800	W Seminary Ave	8		530
15	4900	W Seminary Ave	8		530
15	4900	Chamberlayne Ave	8		709
15	4300	Chamberlayne Ave	12		439
15	4311	Chamberlayne Ave	8		700
15	4200	Chamberlayne Ave	12		450
15	3400	Gloucester Rd	15	185	185
16	3013	North Ave	6	20	
16	4800	E Seminary Ave	8		550
16	1600	Mechanicsville Tpk	12	155	155
16	900	N Hamilton St	18	354	354
16	900	N Hamilton St	18	145	145
17	3200	Alvis Ave	6	68	
17	1106	Libbie Ave	6	45	
17	4200	Chamberlayne Ave	12		675
17	3913	Hermitage Rd	8		274
17	4003	Hermitage Rd	8		200
17	1900	Carter St	8	73	73
17	1900	Texas Ave	8	86	86
17	1900	Texas Ave	8	140	140
17	1200	E Main St	36x48	12	12
18	1200	Idlewood Ave	18	10	10
18	1200	Idlewood Ave	18	75	75
18	1200	Idlewood Ave	18	56	56
18	10	N Laurel St	30	218	218
19	4904	Monument Ave	6	32	
19	1709	Decatur sty	6	24	
21	1200	Wallace St	8	209	209
21	1200	Wallace St	8	183	183
21	1500	W Main St	24x36	18	18
22	2500	Semmes Ave	12	177	177
22	2900	Hawthorne Ave	78	348	
23	4811	Chamberlayne Ave	12		300
23	4813	Chamberlayne Ave	12		280
23	500	Maple Ave	12	201	201
23	1800	W Broad St	15	266	266
23	1800	W Broad St	15	439	439
24	4021	Mt Vernon St	8		550
24	4000	Mt Vernon St	8		505
24	10	Maxwell Rd	8	70	70
24	10	Maxwell Rd	8	391	391
24	3900	W Grace St	10	409	409
25	4400	Sharon Ct	8	185	
25	211	Massie rd	8	201	
25	4811	Chamberlayne Ave	10		187
25	2100	Hanover Ave	20x30	381	381
26	10	N 9th St	30	173	173
28	3207	Bute Lane	8		320

YEAR: 2013MONTH: October

DATE	BLOCK	LOCATION	PIPE SIZE	SEWER LENGTH (FT)	
				TELEVISED	CLEANED
28	1600	Sunset Blvd	8		75
29	4815	Chamberlayne Ave	12	66	
29	5000	Westover Hills Blvd	8	262	262
29	2000	Riverview Rd	12	190	190
29	1900	Raven St	15	123	123
29	1900	Raven St	15	71	71
29	1900	Raven St	15	29	29
29	1900	Raven St	15	42	42
29	1900	Raven St	15	112	112
30	3800	Glenwood Ave	6	42	
30	1908	Texas Ave	8	280	
30	4421	Warwick Rd	8	146	
30	4421	Warwick Rd	8		495
30	400	Granite Ave	8	484	484
30	2000	Walpole St	8	236	236
31	200	Commonwealth Ave	8	185	185
31	200	Commonwealth Ave	8	323	323
31	200	Commonwealth Ave	8	308	308
31	200	Commonwealth Ave	8	73	73
31	1500	N 19th St	15	186	186
31	1500	N 19th St	15	162	162
				13521	26382

CITY OF RICHMOND, VIRGINIA
DEPARTMENT OF PUBLIC UTILITIES
NINE MINIMUM CONTROLS REPORT

MONTHLY
SEWER TV/CLEANING REPORT

YEAR: 2013MONTH: November

DATE	BLOCK	LOCATION	PIPE SIZE	SEWER LENGTH (FT)	
				TELEVISED	CLEANED
1	400	Pridewood Ln	8	218	218
1	3200	Maury St	12	34	34
1	3200	Maury St	12	168	168
1	3200	Maury St	12	111	111
2	1401	Barriedale Rd	8		800
4	2716	Dunn Ave	6	32	
4	5406	Blueridge Ave	6	20	
4	4815	Chamberlayne Ave	12	211	
4	4815	Chamberlayne Ave	12	149	
4	4815	Chamberlyne Ave	12		357
4	4803	Chamberlyne Ave	12		189
5	5817	Spruance rd	6	32	
5	1702	GROVE AVE	6	93	
5	4200	Chamberlyne Ave	10		550
5	7535	BRISBANE DR	8		300
5	4807	CHAMBERLAYNE VE	8		100
5	1200	Shockoe Ln	16x24	176	176
5	1200	Shockoe Ln	16x24	28	28
5	1400	E Cary St	48	420	
6	4319	Chamberlayne Ave	12	295	
6	4817	Chamberlyne Ave	12		210
6	12th	Hull st	12		320
6	11th	Hull st	12		355
6	1400	Brander st	15		100
6		GRANITE & YORK	8		200
6	1200	E Cary St	24x36	62	62
6	1200	E Cary St	24x36	160	160
6	1200	E Cary St	24x36	188	188
6	1200	E Cary St	24x36	35	35
7	1908	Texas Ave	8	280	
7	4319	Chamberlayne Ave	12	152	
7	3164	DECATURE ST	6	52	
7	1400	Brander st	15		150
7	1000	Forest View Ave	8	265	265
7	1000	Forest View Ave	8	67	67
7	1400	Westwood Ave	12	65	65
7	900	Forest View Ave	12	55	55
7	900	Forest View Ave	12	76	76
7	10	N 15th St	10'x6'	893	893
8	4501	MENOKIN RD	6	86	
8	7000	Old Westham Rd	8		230
8	4803	Chamberlyne Ave	12		157
8	3900	Cary Street Rd	12	333	333
8	3100	Decatur St	54	396	
11	4216	Chamberlayne Ave	12	265	
11	723	GERMAN SCHOOL RD	6	80	
11	4300	Chamberlyne Ave	10		400
11	4217	Westminster	12		370
12	501	E GLADSTONE	6	25	

YEAR: 2013

MONTH: November

DATE	BLOCK	LOCATION	PIPE SIZE	SEWER LENGTH (FT)	
				TELEVISED	CLEANED
12	6836	Old Westham Rd	8		285
12	6934	Old Westham Rd	8		320
12	4803	Chamberlyne Ave	12		444
12	2100	Warwick Ave	8	258	258
12	2400	North St alley	8	28	28
12	2100	Wright Ave	8	144	144
12	2100	Wright Ave	8	148	148
12	600	S Pine St	16/24	234	234
12	09	19th St	30	361	
13	4303	Chamberlayne Ave	12	394	
13	5505	CHESTERFIELD DR	6	34	
13	2864	BICKNELL RD	6	4	
13	4200	Chamberlyne Ave	12		180
13	4300	Chamberlyne Ave	12		400
13	2000	W Grace St	20	317	317
13	5400	Blueridge Ave	27	508	508
14	3119	FLOYD AVE	6	90	
14	4101	Kensington Ave	8		160
14	4237	Chamberlyne Ave	12		170
14	1600	Brook Rd	15	419	419
14	200	N 9th St	20	103	103
15	1355	Evergreen Ave	6	56	
15	8	E BROAD ST	6	19	
15	1630	W MAIN ST	6	98	
15	1400	Davenport Ln	12	37	37
15	1400	Davenport Ln	12	302	302
15	1100	N 35th St	12	285	285
15	3500	Lawson St	24	309	309
18	3300	Grayland ave	6	32	
18	4006	Chevy Chase St	8	119	
18	4000	Chevy Chase st	8		699
18	700	St Christophers Rd	8	253	253
18	700	St Christophers Rd	8	358	358
18	4900	Monument Ave	12	186	186
18	3000	E Broad St	32/48	19	19
18		Bickerstaff Rd	27	205	205
19	4000	Chevy Chase St - alley	8	76	
19	Mt Vernon	Chevy Chase St	8	64	
19	6349	HULL ST	6	50	
19	201	WAKEFIELD RD	6	136	
19	4021	Chevy Chase st	8		300
19	Bellevue	Chevy Chase st	8		545
19	4001	Chevy Chase st	8		320
19	4006	Chevy Chase st	8		535
19	500	W 21st St	12	94	94
19	3000	Grant St	12	154	154
19	3000	Grant St	18	301	301
19	3000	E Broad St	32/48	103	103
20	4000	Chevy Chase St	8	123	
20	4000	Chevy Chase St	8	374	
20	Mt Vernon	Bellevue St	8		455
20	4021	Mt Vernon	8		455
20	6300	Elkhard Ave	8	162	162
20	4500	Brook Rd	30	232	232
20		Bickerstaff Rd	27	204	204

YEAR: 2013

MONTH: November

DATE	BLOCK	LOCATION	PIPE SIZE	SEWER LENGTH (FT)	
				TELEVISED	CLEANED
20		Bickerstaff Rd	27	311	311
20		Bickerstaff Rd	27	257	257
21	3016	Park Ave	6	10	
21	4000	Monticello st	8	131	
21	4101	KENSINGTON AVE	6	40	
21	200	Wakefield Rd	8	313	313
21	4200	E Oxford Cir	8	265	265
21	6300	Elkhard Ave	8	91	91
21	2700	Fendall St	18	272	272
21		Bickerstaff Rd	27	265	265
21		Bickerstaff Rd	27	302	302
21		Bickerstaff Rd	27	254	254
22	4000	Mt Vernon St	8	123	
22	4000	Mt Vernon St	8	193	
22	1903	MILLER AVE	6	60	
22		Bickerstaff Rd	27	280	280
22		Bickerstaff Rd	27	342	342
23	1618	Decatur St	6	35	
23	1121	N 34th St	6	29	
25	20	N DAVIS AVE	6	110	
25	8600	Burgundy Rd	8	626	
25	4600	Foresthill Ave	12	307	
25	26	Bickerstaff Rd	27	354	354
25	26	Bickerstaff Rd	27	367	367
26	1600	Decatur St	6	64	
26	2218	E GRACE ST	6	17	
26	2101	E CARY ST	6	6	
26	10	W CARY ST	6	17	
26	3400	Shaw Lane	8	662	
26	1200	E marshall St	16/24	102	102
27	2623	E BROAD ST	6	42	
				19,162	22,128

CITY OF RICHMOND, VIRGINIA
DEPARTMENT OF PUBLIC UTILITIES
NINE MINIMUM CONTROLS REPORT

MONTHLY
SEWER TV/CLEANING REPORT

YEAR: 2013MONTH: December

DATE	BLOCK	LOCATION	PIPE SIZE	SEWER LENGTH (FT)	
				TELEVISED	CLEANED
2	1211	Richeson Ave	6	64	
2	828	Pepper Ave	6	18	
2		Old Osborne Rd	30		351
2		Old Osborne Rd	30		345
2		Old Osborne Rd	30	351	
2		Old Osborne Rd	30	345	
2	900	Park Ave	16/24	375	375
3	828	Pepper Ave	8	157	
3	1211	Richeson Ave	8	195	
3	3108	Stockton St	12	27	
3	1222	Whitby Rd	6	14	
3	1227	Richeson St	8		230
3	1000	W 43rd St	8	201	201
3	1000	W 43rd St	8	200	200
3	2400	Trenton Ave	15	201	201
3	2400	Trenton Ave	15	218	218
3	2400	Dale Ave	15	181	181
3	2400	Trenton Ave	15	11	11
3		Old Osborne Rd	30		214
3		Old Osborne Rd	30	214	
4	10	W Cary St	16 X 24	315	
4	3913	W Grace St	6	23	
4	1800	3rd Ave alley	8	347	347
4	600	Holly St	24	165	165
4	600	Holly St	24	104	104
4	600	Holly St	24	161	161
5	900	Legion Ave	8	152	
5	913	Legion Ave	8	231	
5	3500	McGuire Ave	8	147	
5	3620	McGuire Ave	8	167	
5	3500	McGuire Ave	8	248	
5	3607	McGuire Dr	8		75
5	3514	McGuire Dr	8		160
5	900	Legion St	8		475
5	3500	McGuire Dr	8		300
5	200	Wakefield Rd	8	313	313
5	4200	E Oxford Cir	8	265	265
5	2600	Berwyn St	12	111	111
5	2600	Berwyn St	12	9	9
5	2400	Yorktown Ave	12	366	366
5	2400	Yorktown Ave	12	346	346
5	3300	Grove Ave	18	199	
5	10	23rd St	20		372
6	1000	Bundy Ave	8	369	
6	1000	Bundy Ave	8	157	
6	1000	Bundy Ave	8		535
6	1012	Bundy Ave	8		165

YEAR: 2013

MONTH: December

DATE	BLOCK	LOCATION	PIPE SIZE	SEWER LENGTH (FT)	
				TELEVISED	CLEANED
6	2600	Berwyn St	15	172	172
6	2600	Berwyn St	15	124	124
6	200	Lombardy	30		255
7	828	Faye St	6	56	
8	304	Brandon Rd	6	56	
8	4010	Cutshaw Ave	6	94	
8	1900	N 19th St	6	40	
9	516	N 28th St	6	16	
9	1512	Georgia Ave	6	120	
9	708	N 27th sty	6	32	
9	1300	Evert Ave	8	103	
9	1300	Evert Ave	8	331	
9	800	Brandwell Rd	8		701
9	700	Brandwell Rd	8		277
9	919	Greenridge Rd	8		500
9	800	Greenridge Rd	8		698
9	900	Greenridge Rd	8		700
9	1330	Evert sty	8		393
9	1200	Richeson Rd	8	235	235
10	3300	McGuire Ave	8	196	
10	3300	McGuire Ave	8	196	
10	3000	Swanson Rd	8		150
10	3312	McGuire Dr	8		199
10	900	Glenburnie Rd	8	294	294
10	2300	N-23rd St	12	30	30
10	20	N Davis Ave	12	118	118
10	20	N Davis Ave	12	262	262
11	3429	Hanover Ave	6	76	
11	2815	North Ave	8	119	
11	North Ave	Barton in the alley	8	217	
11	301	N Robinson	6	144	
11	2815	North Ave	8		535
11	1400	Laburnum Ave alley	8	294	294
11	4000	Cutshaw Ave	12	286	286
11	4000	Cutshaw Ave	12	281	281
12	2100	Maplewood	6	40	
12	1515	Pelham Dr	6	40	
12	2400	Semmes Ave	8	293	293
12	3400	Lamont St	10	290	290
12	3400	Lamont St	10	38	38
12	4300	Hillcrest Ave alley	12	299	299
12	4300	Hillcrest Ave alley	12	225	225
12	1900	Hillcrest Cir	12	136	136
13	1300	Evert Ave	8	193	
16	1500	Webster St	12	122	
16	500	Pollock St	8	494	
17	2319	Hanover Ave	6	32	
17	900	Greenridge dry	8	295	
17	800	Greenridge dry	8	167	
17	900	Bramwell Rd	8	114	
17	900	Greenridge dry	8	337	
17	900	Bramwell rd	8		498
18	1317	Leicester rd	6	22	
18	1500	Webster St	12	198	198

YEAR: 2013MONTH: December

DATE	BLOCK	LOCATION	PIPE SIZE	SEWER LENGTH (FT)	
				TELEVISED	CLEANED
18	1500	Webster St	12	82	82
18	1500	Webster St	12	227	227
19	4719	Leonard Parkway	6	96	
20	1420	Sunbury Rd	6	20	
20	3519	Moss Side Ave	6	120	
20	2815	North Ave	8	66	
20	4205	Fauquier Ave	8	75	
20	2815	North Ave	8		163
20	1300	N 20th St	12	145	145
20	2900	W Grace St alley	39	325	325
24	3900	W Grace St alley	10	409	409
26	3227	Douglasdale Rd	6	40	
26	3400	Noble Ave	8	31	31
26	3400	Noble Ave	10	8	8
26	3400	Noble Ave	10	532	532
26	2800	Q sty alley	12	65	65
26	2800	Q sty alley	12	262	262
27	401	Ladies Mill rd	6	24	
27	6059	Worthington rd	6	60	
27	5100	Dorchester Rd	12	237	237
27	5100	Dorchester Rd	12	318	318
30	2313	Carrington St	6	8	
30	3603	Meadow Bridge Rd	6	40	
31	224	Bartee Rd	6	5	
31	804	N 38th St	12		500
31	800	Lincoln Ave	12	390	390
31	3200	1st Ave alley	18	507	507
				18,286	19,478

CITY OF RICHMOND, VIRGINIA
DEPARTMENT OF PUBLIC UTILITIES
NINE MINIMUM CONTROLS REPORT

YEARLY
SEWER TV/CLEANING REPORT

YEAR: 2013

DATE	MONTHLY TOTAL LENGTH OF SEWER TELEVIEWED	MONTHLY TOTAL LENGTH OF SEWER CLEANED
January	21,514.00	29,409.00
February	15,808.00	17,746.00
March	12,393.00	24,588.00
April	11,159.00	9,969.00
May	11,679.00	16,404.00
June	8,491.00	22,591.00
July	11,758.00	18,559.00
August	14,206.00	27,235.00
September	27,737.00	10,183.00
October	13,521.00	26,382.00
November	19,162.00	22,128.00
December	18,286.00	19,478.00
YEARLY TOTAL	185,714.00	244,672.00

Combined Sewer System Report for 2013

APPENDIX 4-4

Catch Basin Cleaning

CITY OF RICHMOND, VIRGINIA
DEPARTMENT OF PUBLIC UTILITIES
NINE MINIMUM CONTROLS REPORT

YEARLY
Catch Basin Cleaning Summary

YEAR: 2013SIGNATURE: Howard Glenn

DATE	MONTHLY TOTAL OF CATCH BASIN CLEANED	PERCENT OF TOTAL CATCH BASINS
JANUARY	87	0.29
FEBRUARY	162	0.54
MARCH	275	0.92
APRIL	190	0.63
MAY	266	0.89
JUNE	324	1.08
JULY	246	0.82
AUGUST	178	0.59
SEPTEMBER	232	0.77
OCTOBER	269	0.90
NOVEMBER	121	0.40
DECEMBER	177	0.59
YEARLY TOTAL	2527	8.42

Combined Sewer System Report for 2013

APPENDIX 5-1

Sewer Relining

CITY OF RICHMOND, VIRGINIA
DEPARTMENT OF PUBLIC UTILITIES
NINE MINIMUM CONTROLS REPORT

YEARLY
SEWER LINING REPORT

YEAR: 2013

DATE	MONTHLY TOTAL LENGTH OF SEWER LINED
January	4,313
February	0
March	4,329
April	4,557
May	4,303
June	8,694
July	3,251
August	835
September	3,013
October	3,013
November	1,672
December	2,000
YEARLY TOTAL	39,980

CITY OF RICHMOND, VIRGINIA
DEPARTMENT OF PUBLIC UTILITIES
NINE MINIMUM CONTROLS REPORT

FORM B-1B

MONTHLY
SEWER LINING REPORT

YEAR: 2013

MONTH: January

DATE	BLOCK	LOCATION	PIPE SIZE	Linear Footage Lined
4	900	Dunbar St	8	350
5	5000	Patterson Av	8	310
6	5100	Patterson Av	8	493
7	5300	Patterson Av	8	317
7	5300	Patterson Av	8	95
11	5100	Patterson Av	8	409
12	5000	Patterson Av	8	208
13	5000	Patterson Av	8	266
21	5100	Patterson Av	8	36
22	300	Nansemond Ave	12	289
25	3300	Kensington Ave	12	28
26	3300	W Franklin St	12	476
14	5000	Patterson Av	12	267
14	5000	Patterson Av	12	45
18	5200	Patterson Av	15	319
19	5000	Patterson Av	18	63
20	5000	Patterson Av	21	342
				4313

CITY OF RICHMOND, VIRGINIA
DEPARTMENT OF PUBLIC UTILITIES
NINE MINIMUM CONTROLS REPORT

FORM B-1B

MONTHLY
SEWER LINING REPORT

YEAR: 2013

MONTH: February

DATE	BLOCK	STREET	PIPE SIZE	Linear Footage Lined
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No Lining this month

CITY OF RICHMOND, VIRGINIA
DEPARTMENT OF PUBLIC UTILITIES
NINE MINIMUM CONTROLS REPORT

FORM B-1B

MONTHLY
SEWER LINING REPORT

YEAR: 2013

MONTH: March

DATE	BLOCK	Street	PIPE SIZE	Linear Footage Lined
04	4400	Patterson Av	8	42
04	4400	Patterson Av	8	160
05	4900	Patterson Av	8	557
07	4200	Patterson Av	8	204
08	4400	Patterson Av	8	304
11	4500	Patterson Av	8	232
12	4300	Patterson Av	8	130
12	4300	Patterson Av	8	85
12	4300	Patterson Av	8	51
13	3900	Patterson Av	8	198
13	3800	Patterson Av	8	170
18	700	Wisteria	18	346
19	700	Hamilton St	18	204
20	4700	Patterson Av	21	127
21	700	Shadwell Rd	21	249
12	4100	Patterson Av	24	284
12	4100	Patterson Av	24	286
14	900	Dunbar St	30	333
20	5200	Patterson Av	30	44
20	5200	Patterson Av	30	62
23	5200	Patterson Av	36	21
23	5200	Patterson Av	36	240
				4329

CITY OF RICHMOND, VIRGINIA
DEPARTMENT OF PUBLIC UTILITIES
NINE MINIMUM CONTROLS REPORT

FORM B-1B

MONTHLY
SEWER LINING REPORT

YEAR: 2013

MONTH: April

DATE	Block	Location	PIPE SIZE	SEWER LENGTH LINED
11	3900	Patterson Av	8	8
16	5000	Patterson Av	8	43
22	4000	Patterson Av	8	201
23	3900	Patterson Av	8	260
24	4200	Patterson Av	8	202
24	4500	Patterson AV	8	78
09	100	20th St	8	390
09	200	Everett St	8	19
30	400	Jefferson Davis	8	244
24	1900	Everett St	10	285
24	1900	Everett St	10	83
11	400	Sheppard	12	328
17	2900	Park	12	138
23	2900	Patterson	12	209
08	2200	Decatur St	12	312
10	200	Stockton St	12	126
25	800	Lafayette	15	344
16	2000	Decatur St	15	276
17	1900	Decatur St	18	291
17	1900	Decatur St	18	47
20	2000	Stockton St	18	298
22	1900	Stockton St	24	47
22	1900	Stockton St	24	24
23	2000	Stockton St	24	304
				4557

CITY OF RICHMOND, VIRGINIA
DEPARTMENT OF PUBLIC UTILITIES
NINE MINIMUM CONTROLS REPORT

FORM B-1B

MONTHLY
SEWER LINING REPORT

YEAR: 2013

MONTH: May

DATE	BLOCK	LOCATION	PIPE SIZE	Linear Footage Lined
02	400	Jefferson Davis Hwy	8	204
03	300	7th St	8	333
06	300	Jefferson Davis Hwy	8	442
30	500	Marx St	8	300
02	2200	Stockton St	12	174
15	600	Hull St	12	283
15	500	Hull St	12	302
16	300	Hull St	12	527
09	0	Mulberry Alley	12	120
02	5300	Kingsbury Rd	15	109
01	100	Jefferson Davis	18	444
14	2000	Everett St	24	125
01	5300	Kingsbury Rd	24	171
01	5300	Kingsbury Rd	24	70
11	5200	Patterson Av	27	203
11	900	Greenway Ln	27	211
07	5200	Patterson Av	30	285
				4303

CITY OF RICHMOND, VIRGINIA
DEPARTMENT OF PUBLIC UTILITIES
NINE MINIMUM CONTROLS REPORT

FORM B-1B

MONTHLY
SEWER LINING REPORT

YEAR: 2013

MONTH: June

DATE	BLOCK	LOCATION	PIPE SIZE	Linear Footage Lined
03	0-99	N. Stafford	12	213
04	2600	Main St	12	220
04	2700	Main St	12	152
05	0-99	Ally S. Boulevard	12	174
05	0-99	Ally S. Boulevard	12	19
10	0 - 99	N. Stafford St	12	196
11	0-99	Alley parelliel to Boulevard	12	353
12	0-99	Robinson St	12	252
17	200	Floyd Alley	12	224
19	100	Dooley	12	276
19	0	Dooley	12	226
20	100	Crenshaw	12	302
20	100	Crenshaw	12	47
20	0 - 99	Alley in Boulevard	12	67
20	0-99	Alley in Boulevard	12	134
21	0-99	Crenshaw Av	12	210
21	2700	Floyd Alley	12	132
27	900	Canal St	12	50
24	6400	Hanover	12	7
24	6400	Hanover	12	49
24	6400	Hanover	12	107
26	700	Tiber	12	403
26	700	Tiber	12	140
19	500	N. Sheppard St	12	128
19	500	N. Sheppard St	12	125
21	3300	Kensington Av	12	495
25	900	Canal St	15	60
25	900	Canal St	15	92
25	900	Canal St	15	98
26	900	Canal St	15	57
26	900	Canal St	15	197
12	3500	Stuart	15	86
12	3500	Stuart	15	247
13	400	Thompson	15	47
13	400	Thompson	15	67
01	300	Hull St	20	50
25	2200	Maury	21	258
25	800	Hull	24	295
22	200	J D Hwy	30	26
22	200	J D Hwy	30	444
22	200	J D Hwy	30	443
24	300	J D Hwy	30	9
04	200	W 6th St	36	409
06	400	Brander	36	353
26	2200	Maury	36	0
11	10	W 1st ST	42	365
19	100	E 1st St	42	390

8694

CITY OF RICHMOND, VIRGINIA
DEPARTMENT OF PUBLIC UTILITIES
NINE MINIMUM CONTROLS REPORT

FORM B-1B

MONTHLY
SEWER LINING REPORT

YEAR: 2013

MONTH: July

DATE	BLOCK	LOCATION	PIPE SIZE	Linear Footage Lined
08	0-100	Alley S. Boulevard	12	376
08	400	N. Davis	12	73
09	3400	Ellwood	12	268
09	3200	Davis	12	351
10	200	N. Boulevard	12	180
10	500	N. Stafford	12	128
15	3400	Floyd Av	12	253
16	3400	Floyd Av	12	173
17	0 to 100	Sheppard St	12	107
17	0 to 100	Sheppard St	12	215
17	0 to 100	Sheppard St	12	53
23	2500	N. Boulevard Alley	12	283
24	0 -99	Sheppard St Alley	12	114
24	0 - 99	Sheppard St Alley	12	42
22	2500	Grace St	15	340
15	100	Hull St	36	60
15	100	Hull St	36	183
15	100	Hull St	42	52
				3251

CITY OF RICHMOND, VIRGINIA
DEPARTMENT OF PUBLIC UTILITIES
NINE MINIMUM CONTROLS REPORT

FORM B-1B

MONTHLY
SEWER LINING REPORT

2013 2012

MONTH: August

DATE	BLOCK	STREET	PIPE SIZE	Linear Footage Lined
08	400	N. Nansemond	12	47
08	400	N. Nansemond	12	24
09	0 - 99	S. Nansemond St	18	205
12	0 - 99	S. Nansemond St	18	204
07	2900	Ellwood Av	20	230
12	1900	Everett	6	5
14	1900	Everett	6	10
03	5400	Richmond / Henrico	6	5
04	2000	Decatur	6	5
12	3900	Patterson Av	6	5
12	3900	Patterson Av	6	5
13	3900	Patterson Av	6	5
13	3900	Patterson AV	6	5
14	5000	Patterson Av	6	5
14	5000	Patterson Av	6	5
14	5000	Patterson Av	6	5
22	3400	Floyd Av	6	5
22	3400	Floyd Av	6	5
22	3400	Floyd Av	6	5
26	3400	Floyd Av	6	5
26	3400	Floyd Av	6	5
26	3400	Floyd Av	6	5
27	3400	Floyd Av	6	5
27	3400	Floyd Av	6	5
28	3400	Ellwood Av	6	5
28	3400	Ellwood Av	6	5
29	3400	Ellwood Av	6	5
29	3400	Ellwood Av	6	5
29	3400	Ellwood Av	6	5
				835

CITY OF RICHMOND, VIRGINIA
DEPARTMENT OF PUBLIC UTILITIES
NINE MINIMUM CONTROLS REPORT

FORM B-1B

MONTHLY
SEWER LINING REPORT

YEAR: 2013

MONTH: September

DATE	BLOCK	STREET	PIPE SIZE	Linear Footage Lined
09	2300	Franklin	12	55
10	2300	Franklin	12	35
11	2200	Franklin	12	201
11	10	21st St	12	189
11	10	21st St	12	10
11	2200	Franklin	12	279
13	10	19th	12	102
14	10	21st	12	200
16	10	19th St	12	151
26	10	7th	12	152
27	3200	Kensington	12	136
28	1200	Roseneath Av	12	348
30	3000	Kensington	12	366
30	300	Nansemond Av	12	286
27	3300	Kensington Av	12	28
28	3300	Franklin Av	12	475
				3013

CITY OF RICHMOND, VIRGINIA
DEPARTMENT OF PUBLIC UTILITIES
NINE MINIMUM CONTROLS REPORT

FORM B-1B

MONTHLY
SEWER LINING REPORT

YEAR: 2013

MONTH: October

DATE	BLOCK	STREET	PIPE SIZE	Linear Footage Lined
14	200	Gun Club Rd. / Portland Place	8	282
17	200	Gun Club Rd./Portland Place	8	83
08	2900	Park	12	35
08	400	Sheppard	12	41
09	3400	Stuart	12	41
14	3500	Kensington Av	12	100
11	3500	Kensington	12	335
08	100	N Auburn Ave.	12	274
15	2800	Floyd	12	35
23	2900	Alley between W Cary St. and Ellwood Ave	12	210
15	3400	Kensington Place	15	132
15	3400	Kensington Ave.	15	64
15	3400	Kensington Ave.	15	42
15	3400	Kensington Ave.	15	38
22	3300	Park	15	250
24	700	Cleveland	15	152
25	2900	Kensington	15	325
29	600	Cleveland	18	247
21	100	ey between S Boulevard and S Colonial Av	20	327
				3013

CITY OF RICHMOND, VIRGINIA
DEPARTMENT OF PUBLIC UTILITIES
NINE MINIMUM CONTROLS REPORT

FORM B-1B

MONTHLY
SEWER LINING REPORT

YEAR: 2013

MONTH: November

DATE	BLOCK	LOCATION	PIPE SIZE	Linear Footage Lined
06	22	Roseneath	15	196
22	26	Park Ave	15	32
08	12	Park	18	211
11	22	Stuart	18	268
20	22	Kensington Av	18	569
19	18	Patterson Av	20	396
				1672

CITY OF RICHMOND, VIRGINIA
DEPARTMENT OF PUBLIC UTILITIES
NINE MINIMUM CONTROLS REPORT

FORM B-1B

MONTHLY
SEWER LINING REPORT

YEAR: 2013

MONTH: December

DATE	BLOCK	LOCATION	PIPE SIZE	Linear Footage Lined
16	2900	Park	12	360
05	2800	Kensington Ave	15	60
06	3300	Alley of Park Ave	18	247
20	3200	Park	18	249
03	3300	Floyd Ave	20	198
05	3300	Floyd Ave	20	198
06	3200	Ellwood Ave	20	412
18	3000	Monument	20	276
				2000

Combined Sewer System Report for 2013

APPENDIX 9-1

Loose Leaf

CITY OF RICHMOND, VIRGINIA
DEPARTMENT OF PUBLIC UTILITIES
NINE MINIMUM CONTROLS REPORT

YEARLY
LOOSE LEAF COLLECTION SUMMARY

YEAR: 2013

January - December

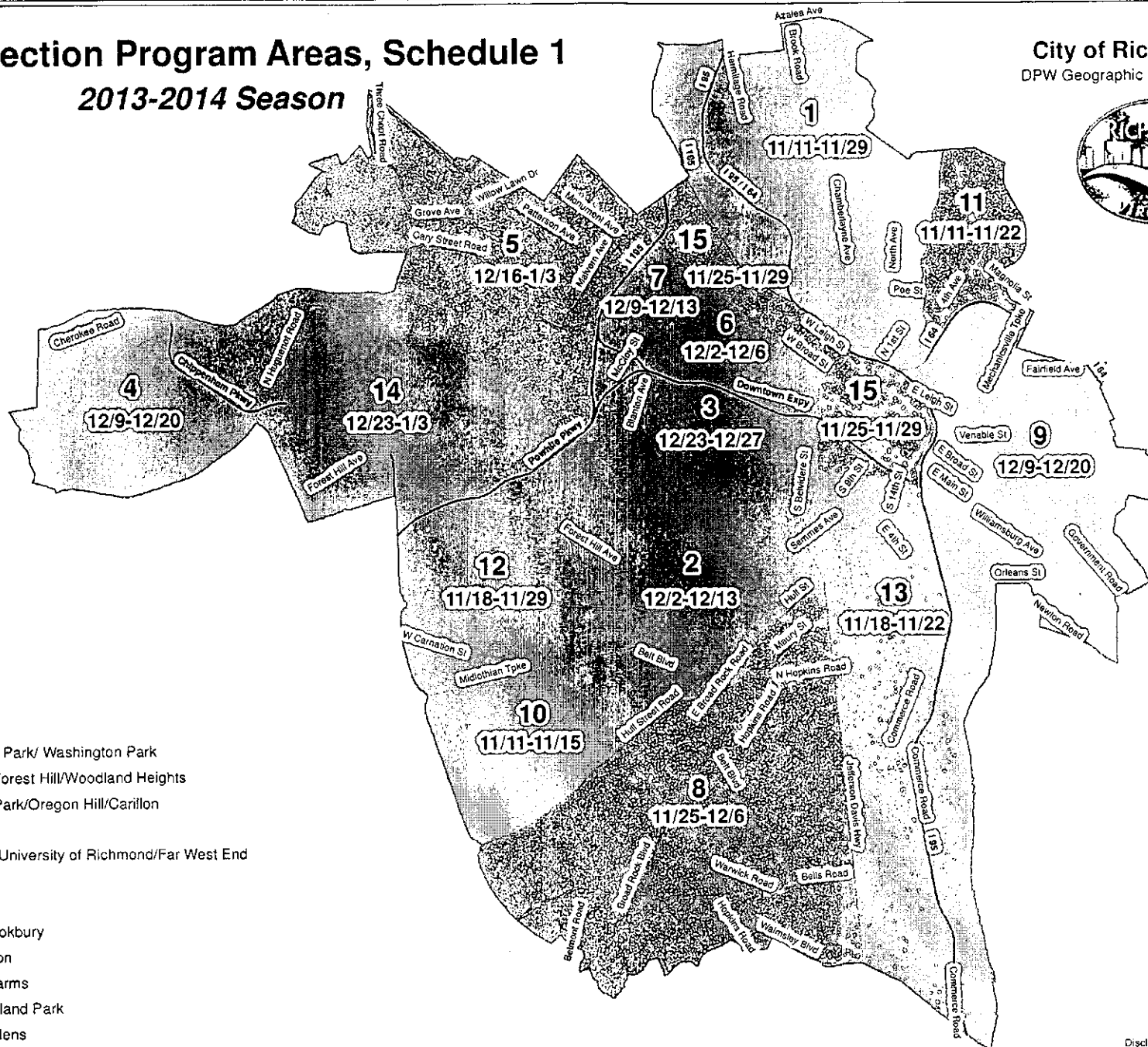
GENERAL RESIDENTIAL ROUTE	TONNAGE
SEE ATTACHED MAP AND LEAF COLLECTION SCHEDULE	14,238

SIGNATURE: Lewis Yancey

Leaf Collection Program Areas, Schedule 1

2013-2014 Season

City of Richmond, VA
DPW Geographic Information Systems



Legend

- Primary Roads
- Highways
- Waterbody

Name

- 1. Bellevue/ Ginter Park/ Washington Park
- 2. Westover Hills/Forest Hill/Woodland Heights
- 3. Maymont/Byrd Park/Oregon Hill/Carillon
- 4. Stony Point
- 5. Windsor Farms/University of Richmond/Far West End
- 6. The Fan/Shaffer
- 7. Museum District
- 8. Broad Rock/Brookbury
- 9. Church Hill/Fulton
- 10. Worthington Farms
- 11. Northside/Highland Park
- 12. Westover Gardens
- 13. Bellemeade
- 14. Stratford Hills/Willow Oaks
- 15. Newtowne/Carver/Jackson Ward

This Leaf Collection Schedule is subject to change due to inclement weather.
Map Created by City of Richmond, Department of Public Works GIS, 9/11/2013 / BMD

Disclaimer:
The City of Richmond assumes no liability either for any errors, omissions, or inaccuracies in the information provided regardless of the cause of such or for any decision made, action taken, or action not taken by the user in reliance upon any maps or information provided herein.



Media Advisory

Richmond, Virginia
Mayor Dwight C. Jones

For Immediate Release
November 1, 2013
For more information, contact:
Sharon North – (804) 646-5607

Vacuum Leaf Collection Begins November 11

RICHMOND, VA – The City's annual Vacuum Leaf Collection Program begins on Monday, November 11. The schedule for the first cycle is as follows:

- Worthington Farms
November 11 - 15
- Northside/Highland Park
November 11 - 22
- Bellevue/Ginter Park/Washington Park
November 11 - 29
- Bellemeade
November 18 – 22
- Westover Gardens
November 18 – 29
- Newtowne/Carver/Jackson Ward
November 25 – 29
- Broad Rock/Brookbury
November 25 – December 6
- The Fan/Shaffer
December 2 – 6
- Westover Hills/Forest Hill/Woodland Heights
December 2 – 13
- Museum District
December 9 - 13

- Church Hill/Fulton
December 9 - 20
- Stony Point
December 9 - 20
- Windsor Farm/Univ. of Richmond/Far West End
December 16 – January 3
- Maymont/Byrd Park/Oregon Hill/Carillon
December 23 – 27
- Stratford Hills/Willow Oaks
December 23 – January 3

Residents should rake leaves to the property line adjacent to their street prior to their scheduled vacuum collection date. Leaves and other debris should never be raked or placed into the street or culvert. Dirt, rocks, metal or branches should be removed from leaf piles, as these items will prevent City crews from collecting your piles.

Residents who bag leaves should use biodegradable brown paper lawn or leaf bags because they are more environmentally friendly and can be recycled with the leaves. City crews will pick up 25 bags of leaves year round on regular trash collection days. There is no limit to the number of bags that will be collected during each neighborhood's designated leaf vacuum collection cycle.

City residents can also dispose of leaves by taking them to several locations: East Richmond Road Convenience Center at 3800 East Richmond Road; Maury Street Landfill at 2900 Maury Street; and the "Powerline" at 8600 Huguenot Road at the northwest corner of Chippenham Parkway.

Residents should note the vacuum schedule may change as a result of inclement weather. The vacuum leaf schedule and information about other city services are available at www.Richmondgov.com. The schedule is also available by calling the leaf hotline at (804) 646-LEAF (5323).

###

Combined Sewer System Report for 2013

APPENDIX 10-1

Plant Tours

City of Richmond, Virginia
Department of Public Utilities

Wastewater Treatment Plant

Plant Tours
2013

Date	Group	No. of People
Feb, 2013	Ready Creek citizens	10
Sept, 2013	Richmond's Citizen Group	7
Nov, 2013	EPA region III, DEQ	8

Combined Sewer System Report for 2013

APPENDIX 10-2

Adopt-A-Spot

ADOPT A SPOT REPORT
CLEAN CITY COMMISSION
DEPARTMENT OF PUBLIC WORKS

	Participant	Date	Contacting/Adopting	Hours	Spots
	Bryan Park	1/21/2013	Wynn Price	36	2
		4/6/2013		30	120
1	Alliance for the Chesapeake Bay at Reedy Creek	4/6/2013		45	2
	Omega Psi Phi Fraternity - Brook Rd & W. Duval St - E. Duval Street	7/21/2012	Eric Monroe - 647-7511	12	1.5
	2nd St. & E. Duval St	4/20/2013		3	2
	brook rd & W. Duval St			3	2
2	Bryan and Nancy Traylor - Alberarle St to Spring St. -		Bryan & Nancy Traylor - 399-7495		
		5/26/2013		2	2
3	VCU AmeriCorps - Bowling Green Rd	9/15/2012	Jenny Galber	10	2
4	Higland Park Souther Tip - 2500 Robert Moore Cir and 1600 4th Ave		Louise Cane - 321-1759		
5	.Richmond Alumnae Chapter Delta Sigma Theta Sorority INC. - Clay St to N. 3rd. St		Diana Herndon - 304-6063		
	brook rd & W. Duval St	10/13/2012		3	1
	2nd St. & E. Duval St	1/13/2013		10	1.5
	brook rd & W. Duval St	1/12/2013		10	1.5
	Brook rd & W. Duval St	3/9/2013		6	1
		4/13/2013		6	1
		5/11/2013		5	1
6	Buster & Peter - 2700= Barton Ave to 2800 Barton ave	11/28/2012	Buster Johnson 822-1500.		
		3/22/2013		2	1
7	Community 50/50- Whitcomb St		Morgan Turner		
		4/30/2013		7	2
8	Department of Justices - Hospital Street		Peggy Downy 646-8087	9	2
		02/09/13			
	Hospital Street	03/10/13		4	1
		03/23/13		4	2
9	Diaz Martines Family - Warwick Rd. from Jefferson Davis to Broad Rock.	01/09/13			
10	Embrace Richmond - Hanes, Fendall, Crawford, Edgewood, Brookland Blvd, Griffin	7/3/2012	Rasarah Bey - 321-2511 x 107	8	4
		8/8/2013		6	1

13	Exerise Science Club at VCU - Harrison St btw Main St and Cary St		Sarah Fauroughi 202 302 3578			
		10/6/2012		5	1.5	2
		3/23/2013		9	1	2
		4/20/2013		9	1	1
14	Fairfield Boys & Girls Club of Metro Ric. - 2500 - 2700 Phaup St.	9/5/2012	William Morris 225-0132			
15	Fountain Lake Condo Assoc. - 400 blk S. Davi & S. Robinson btw Lakview & Grayland Ave	5/16/2013	Judith Harris - 354-0889	2	3	3
		5/29/2013		2	2	4
		7/16/2013		2	2	2
15	Debbie & Dennis Flippen - Lower open field behind Carillon		Debbie Flippen 359-1415			
	Park Side 1400 - 1402 Pump house Dr	4/22/2013		2	1	0
		5/13/2013		1	1	
16	Franklin Grove - Williamsburg Rd. & Main St					
		6/20/2012		5	4	6
17	Grap4lyfe - 2301 Cedar St.	8/24/2012	Jamie McBride -986-2964			
18	Kimberly Wilform/Rising Sun & Morris Fam - Martin Luther King Bridge	8/15/2012		2	1.5	2
19	Knights of Pythagoras - Prince Hall Masons Lodge #23		Wilkton Shaw - 221-1846			
			L. Allen - 458-5160			
20	Linear Park - 600 Albermale St - 600 Spring St	5/9/2013	Bryan & Nancy Traylor- 399-7495			
		5/13/2013		2	3	2
21	National Association of Black at VCU - South Madison St		Crystal Mckinney 757-535-5908			
		3/30/2013		5	2	1
		4/13/2013		4	1	1
22	Maggie Walker Governor's School National Honor Society - W. Leigh St. from N. Belvidere to N. Lombardy St.		Denise Yagel - 887--7758			
23	Pretty MissFitz Motorcycle- Corner of Covington Rd. & Midlothian to Media Rd	4/11/2013	Michelle Pressley - 971-9774			

24	PSB Plus Size Beautis - Hull st. & Commerce intersection		Marquella Whitters - 898-8925			
25	Phi Mu Alpha Frat - Park Ave & Triangle Park 922 Park Ave	4/7/2013	Jesse Williams	6	1	2
26	Richmond Guardian Angels - Rady Street	7/12/2012	Tom- 502 - 8345	4	3	6
	3200 Utah Pl	7/20/2012		9	3	11
	River City Comprehensive Counseling Services- 1000 Hull St from 10th- to 11th St		Lauren Nash - 230-0998			
27	RVA Beard League - 9636 Kingscroft Dr.	8/15/2012	Chad Roberts 290-4202 9(w) 631-3685			
		11/18/2012		6	3	9
		1/20/2013		8	3	8
		4/21/2013		8	2	8
28	RVA Tailors - 2900 W. Clay St		Scott Weisberger - 437-0894			
		3/30/2013		1	1	2
		5/31/2013		2	2	4
29	Sport Anglers Club		Pernell Taylor - 627-0208			
		3/16/2013		1	1	2
		4/10/2013		2	1.5	8
		6/5/2013		3	1.5	4
		6/5/2013		3	1.25	4
30	Sigma Phi Epsilon - Belvidere & Franklin to Jefferson St & Franklin St					
31	Omega Psi Phi Fat	4/20/2013	Eric Monroe			
	brook rd & W. Duval St			3	2	5
	2nd St. & E. Duval St			3	2	2
32	The Owen Family - Barton Ave btw Lancaster St and 27 6 Barton Ave	11/28/2012	Dorothy Owen - 954-300-9511			
33	Theta NuXi Multicultural Sorority Inc - W. Main St form N. Harvie to N Cherry St		Laruren Dickerson - 347-6088			
34	Transit Divas Social Club - E. Belt Blvd from Crutchfield to Hull Street	5/9/2013	Tracy Jackson -397-4104			
		6/15/2013		10	2.5	9
		6/29/2013		10	2.5	7
		7/1/2013		9	2	2

35	Tru Divaz Sc Inc. - 1700 & 1800 Halifax Ave	7/31/2012	Felicia Harrison 728-7655			
		9/31/12		6	1	3
36	TrueTimbr Tree Service & Riverside Outfitters - Old Westham Rd from Cherokee Rd to Hathaway Rd		Sonja Sims - 218-8733			
	Urban League - Young Professionals - 1400 Hull St.	3/13/2013	Shamica Bowen - 943-5036			
		4/27/2013		6	2	6
37	VCU AmeriCorps - Bowling Green Rd	9/15/2012	Jenny Galber	10	2	9
		4/20/2013		9	2	6
		5/18/2013		10	2	5
		6/15/2013		7	2	3
38	VCU Geography & Ecology Students - Reedy Creek & St. Johns Woods	10/14/2012	Helen Ruth Aspaas	8	8	15
		7/20/2012		9	3	11
		7/25/2012		5	45	5
		8/1/2012		5	45	5
		8/8/2012		6	1	4
		8/8/2012		6	1	4
		12/2/2012		8	2	5
		7/14/201		8	1	1
		8/11/012		6	1	1
		9/8/2012		8	1	1
		10/13/2002		8	1	1
		7/8/2012		12	1	5
		8/5/2012		6	1	1
		8/26/2012		4	1	1
		9/23/2012		8	1	1
		9/7/212		4	1	4
		3/9/2013		6	1	6
		9/31/12		6	1	3
		11/18/2012		8	0.5	3
		12/23/2012		7	1.5	3
		1/13/2013		7	1	3
		11/10/2012		8	2	5
				4	1.5	1
		11/18/2012		4	1	2
		1/21/2013	Bianca Armstead - (757)921-1680	9	2	2
		11/9/2012		8	10	15
		8/25/2012		12	5	5
		9/15/2012		8	5	15
		10/3/2012		2	2.5	6
				4	1.5	4
		11/7/2012		3	1.5	4

		11/27/2012		2	2	5
		12/2/2012		9	2	30
		12/15/2012		1	1.5	1
		12/29/2012		1	1.5	1
		1/19/2013		2	1	5
		1/25/2013		1	1.5	1
		2/2/2013		1	1.5	1
		2/26/2013				3
39	Communtiy Service		Officer Harris			
	Hull & Blvd	4/6/2013			3	10
	Jefferson Davis & Bellemeade	4/10/2013			2	20
	Wright Ellis - 41st & Westover Hills Blvd	3/30/2011	233-1679	1	1	2
	W. F. Cromartie Lodge #1 - Broad #16 past Marshall St. - cleaned around slave grave yard	12/15/2012	C. Tex Collins - 762-383- 9084	7	2.5	13
40						
41	Wilcardz Vixenz SC- 3 7th & Hull St	4/29/2013	Jemeka Joyner - 334- 3886			
	Total			528	269.25	613

Combined Sewer System Report for 2013

APPENDIX 10-3

Trash Pick Up

City of Richmond, Virginia
Department of Public Works
Nine Minimum Controls Report

Yearly Litter Basket Collection Summary

Year 2013

Signature Frank J. Motley

Month			Tonnage
January			41.5
Febuary			35.46
March			41.26
April			34.07
May			36.01
June			30.81
July			44.36
August			89.12
September			43.46
October			32.17
November			31.98
December			34.5
Yearly Total			494.7

Combined Sewer System Report for 2013

APPENDIX 10-4

Street Sweep

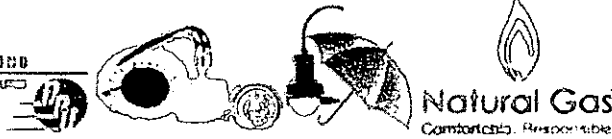
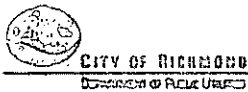
2013 Residential Street Sweeping
Total lane Miles Swept - 17,060
Debris Tonage - 15,750

Routes	Area Covered	Dates
1	Fulton/Church Hill	6/3- 6/7, 9/2-9/6
2	Church Hill	6/10-6/14, 9/9-9/13
3	Highland Park	4/15-4/19, 7/22-7/26
4	Northside/Ginter Park	6/24-6/28, 9/23-9/27
5	Bellevue/Sherwood Park/Washington Park	6/17-6/22, 9/16-9/20
6	Lower West End	4/8-4/12, 7/15-7/19
7	Far West End	7/1-7/5, 10/1-10/5
8	Bainbridge/Bellemeade/Davee Gardens	5/13-5/17, 8/12-8/16
9	Woodland Heights/Swansboro/Westover Hills	5/20-5/31, 8/19-8/30
10	Downtown/Carver/Newtowne/Millie Jones	4/1-4/5, 7/8-7/12
11	The Fan	4/29-5/3, 7/30-8/3
12	West of the Boulevard	5/6-5/10, 8/5-8/9
13	Neighborhood Subdivisions	4/22-4/26, 7/22-7/26

Combined Sewer System Report for 2013

APPENDIX 11-1

City Press Releases



Monday, February 24, 2014

1900 Block Grove Avenue Green Alley Project

Meeting: Wednesday, Feb. 26, 6 p.m., Binford Middle School auditorium

This green alley project will address ponding that occurs within the alley after rains and runs off onto adjacent properties. The alley runs between N. Granby Street and N. Meadow Street, between Grove and Hanover avenues.

Green alleys provide a porous surface of permeable, interlocking concrete pavers that allow rainwater to soak in rather than run off.

Project Schedule: Construction planned for summer 2014, requiring 30-45 days to complete. Property owners will be notified prior to construction start. Alley will be closed to vehicles and pedestrian traffic during construction. Equipment will be in the alley during the duration. Existing vegetation will be removed and replaced with grass seed. Supercans and trash will be accommodated.

Posted by Richmond VA Department of Public Utilities at 2:30 PM

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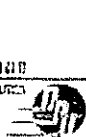
► March (1)

▼ February (3)

[1900 Block Grove Avenue Green Alley Project](#)
[Public Information Meetings about Virginia Stormwa...](#)



CITY OF RICHMOND
Department of Public Utilities



Natural Gas
Conscientious. Responsible.

Monday, February 24, 2014

Public Information Meetings about Virginia Stormwater Management Program Permit Changes

Virginia law requires all Virginia localities to be responsible for program implementation and enforcement of the Virginia Stormwater Management Program requirements beginning July 1, 2014.

The Department of Public Utilities will hold four information meetings about the permit changes for contractors, developers, engineers, and residential and commercial builders, businesses, organizations, or interested private citizens.

Monday, March 3
5:30-7:30 p.m.
Pine Camp, 4901 Old Brook Road

Thursday, March 6
5:30-7:30 p.m.
Southside Community Center, 4100 Hull Street

Monday, March 10, and Wednesday, March 12
5:30-7:30 p.m.
Patterson Avenue Library, 5420 Patterson Avenue

Questions? Call DPU Water Resources at 646-7586

Posted by Richmond VA Department of Public Utilities at 1:14 PM

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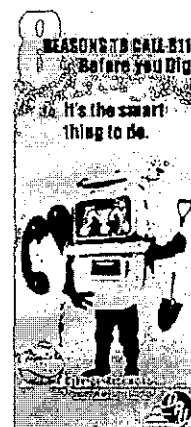
Natural Gas

Tuesday, February 18, 2014

Wanna Hear Some Dirty Words?



"Wanna Hear a Dirty Word?" DPU Stormwater Public Education Campaign kicks off today. Designed to bring public attention to the issues caused by polluted stormwater runoff, the city of Richmond Department of Public Utilities airs three spots that tell the public how to be part of the solution by being good stewards of our environment. Pollution is everyone's issue, but it's an easy fix. The three core messages of the



Emergency?

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Pages

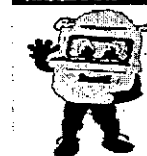
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Chesapeake Bay Executive Meeting, July 11, 2011, Maymont Nature Center

Stormwater Utility's First Year Report

Winter 2011

The Stormwater Utility of the city of Richmond Department of Public Utilities had a busy first year with each of the City Council districts benefiting from a stormwater project. A few of the improvements that were completed:

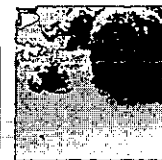
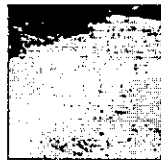
- During the first year, the Stormwater Maintenance Team closed 1,065 citizen request tickets.
- The Stormwater Maintenance Team vacuumed 2,871 catch basins, cleaned 5.4 miles of storm sewers and maintained 28.2 miles of drainage ditches. Clean catch basins prevent flooding and standing water.
- The team inspected 2,273 construction sites, tracked 124 projects, and issued 96 violations for Erosion and Sediment Control.

Maintenance of catch basins and storm sewers prevents stormwater pollution runoff into the James River and Chesapeake Bay, reduces mosquito infestation and provides a cleaner appearance to city neighborhoods.

Along with cleaning and drainage infrastructure maintenance, the utility encourages citizens to install Low Impact Design (LID) components on their property. LID allows stormwater to be filtered or stored on site, instead of flowing untreated to the James River or Chesapeake Bay.

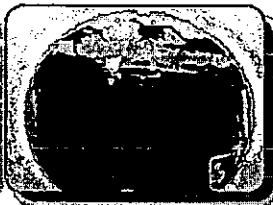
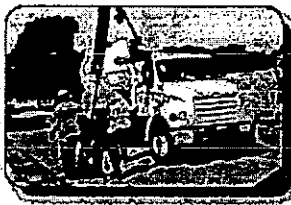
Some examples of LID are:

- On-site stormwater storage
- Rain gardens
- Vegetated filter strips
- Permeable pavers



Vegetated Filter Strips Permeable Pavement On-Site Storage Rain Garden

To find out what you can do to help prevent pollution to Richmond's waterways, or if you want a stormwater presentation at your next civic association meeting, call the stormwater utility public education and outreach coordinator at 646-0177.



A catch basin full of debris is vacuumed by the Stormwater Maintenance Team. What a difference!

Science Museum of Virginia Steps Up

Spring 2010

When the Science Museum of Virginia received its first stormwater utility bill for \$20,000, they weren't surprised. The museum, housed in Richmond's former railroad depot, sits on 38 acres of which 14.5 acres are concrete and buildings, including train sheds, the IMAX theater and planetarium.

Not only that, a block-long parking lot in front of the Children's Museum of Richmond next door actually belongs to the Science Museum. The stormwater fee is based on the amount of impervious surface area a parcel contains.



The museum obtained a \$700,000 grant from the National Fish and Wildlife Foundation last year to develop stormwater mitigation components for the museum and acquired another \$700,000 in matching funds from the Virginia Network for Education of Municipal Officials, National Oceanic and Atmosphere Administration Coastal Services and Chesapeake Bay Office, the Virginia Department of Conservation and Recreation, the

Alliance for the Chesapeake Bay, Virginia Commonwealth University (VCU), Virginia Tech, the University of New Hampshire and the city of Richmond.

After all the low impact improvements are in place, the museum hopes to qualify for a 50 percent credit fee reduction available to non-residential properties.

Bayscape landscaping was put in place last year. An area between the museum's driveway and the parking lot in front of the Children's Museum was planted with native vegetation that can absorb stormwater runoff from the semi-circular driveway in front of the museum. By September 2010, the museum plans to transform the roof of the IMAX theater into a green roof with plants and vegetation around the dome to filter rain water and provide cooling insulation.

The asphalt under 44 parking spaces in the center of the lot in front of the Children's Museum will be replaced with pervious pavers that absorb water like a sponge instead of directing it toward the street. Even this small area of pavers can quickly absorb up to two acres of stormwater runoff.

Tree wells will be added to the landscaping around the main driveway. Bioretention basins – rows of plants and vegetation – will serve as a buffer between the parking lot and the sidewalk along W. Broad Street.

A cistern will collect rainwater from the train shed canopies and that water will be used to irrigate an urban farming project behind the museum. The museum is also planning exhibits on rain barrels, how rainfall impacts the James River, what chemicals and pesticides do to the water and fish population, the cooling benefits of green roofs, and other related low impact development practices.

Follow the museum's progress at the [Science Museum of Virginia's website](#) and the [Science Museum of Virginia's blog](#).

Following the Stormwater Fees

Winter 2010

The stormwater fees you pay go toward three major components:

Consistent operations and maintenance

This includes the inspection, cleaning and clearing of catch basins, drainage ditches and detention ponds. In the first six months since the stormwater utility was established in June 2009, the Department of Public Utilities' Stormwater Operations and Maintenance Division responded to and closed more than 400 requests. This was in addition to responding to a backlog of 350 requests.



Stormwater Master Plan

This plan is currently in development. The Master Plan takes an overall look at all of Richmond's watersheds and provides a total engineering solution to address problem-areas where a quick fix is inadequate.

Regulatory compliance

The city must ensure that it meets very stringent state and federal stormwater regulatory requirements.

How Stormwater is Tied to Government Regulations

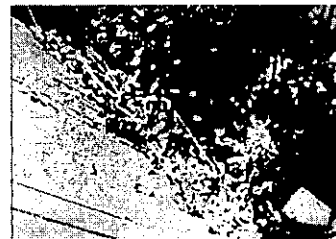
Winter 2010

Polluted stormwater runoff is the leading source of surface water pollution in the United States. The Environmental Protection Agency and the Department of Conservation and Recreation have ordered aggressive standards for pollution reduction in the James River.

By 2013 each locality must develop programs that identify and eliminate non-stormwater discharges into the storm sewer system. These discharges may include illegal dumping of materials such as paint, leaves and debris, oils and grease into storm sewers.

Richmond is also responsible for the enforcement of programs controlling waste and sediment and reducing pollutants from construction sites – major contributors of urban stormwater pollution.

Each locality must bear the financial responsibility of these mandates since they do not come with state or federal funding.



Links

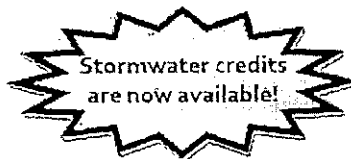
- [Stormwater Brochure](#)
- [Clean Stream Newsletter Winter 2010-11](#)
- [Clean Stream Newsletter Spring 2010](#)
- [Clean Stream Newsletter Winter 2010](#)

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Stormwater credits are now available!

The Stormwater Utility offers customers the opportunity to receive a reduction in their stormwater fee. Customers who reduce stormwater runoff or who improve the quality of the stormwater runoff from their property to the Richmond stormwater system and/or the surrounding water bodies by installing "green practices" will qualify for the credit.

To find out more about the credit program, how it works, and how to apply, please click on the links below.



Stormwater Credit Manuals and Applications

[General Credit Application](#) - To be filled out by all customers applying for stormwater credits.

Residential

- [Credit Manual for Single Family Residential](#)
- [Single Family Residential Credit Application](#)
- [Stormwater Credit FAQs](#)
- [Clean Water Brochure](#)



Non-Residential

- [Credit Manual for Non-Residential and Multi-Family Properties](#)
- [Non-Residential and Multi-Family Credit Application](#)
- [Stormwater Annual Report Blank Form](#)
- [Easement and Maintenance Agreement](#)

Best Management Practices (BMP) for Non-Residential Credits - Click to Expand

Water Conservation Links

- [Capturing and Utilizing Rain Water](#)
- [How to Build a Rain Barrel](#)
- [Rain Garden Technical Guide](#)
- [Plant More Plants](#)



Wednesday, March 9, 2011

Steidel Named DPU Director

Chief Administrative Officer Byron C. Marshall announced that Robert Steidel has been selected to serve as director of Public Utilities, effective March 7. Steidel had served as Interim director for the department since July 31, 2010, replacing Chris Beschler who had served as director of Public Utilities while also serving as deputy chief administrative officer of Operations.

Steidel was the deputy director for the Department of Public Utilities for more than seven years. Prior to beginning city service, he served as the environmental manager for the city of Hopewell's Regional Wastewater Treatment Facility; industrial surveillance supervisor for the Rock River Water Reclamation District in Rockford, Ill.; environmental health sanitarian for Winnebago County Department of Public Health in Rockford, Ill.; and biologist for Winona State University, Minn.



Bob Steidel

"Bob Steidel has proven to be a valuable asset to the Department of Public Utilities and has provided excellent leadership in managing the stormwater utility," said Mayor Dwight C. Jones. "We look forward to his continued expertise in providing utility services to the city and surrounding county residents, while protecting our region's most treasured resource in the James River."

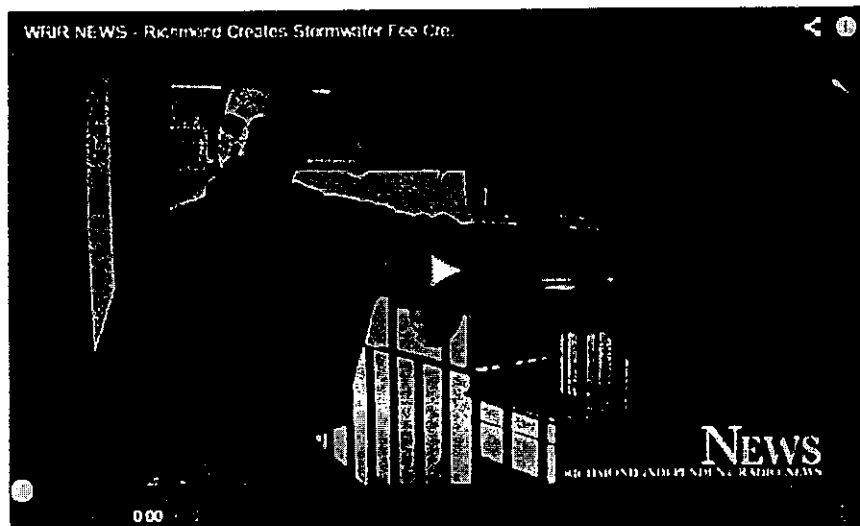
Steidel holds a Bachelor of Arts degree from Winona State University, Minn., and a Master of Public Administration from Virginia Commonwealth University.

Posted by Richmond VA Department of Public Utilities at 8:13 AM

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Tuesday, March 8, 2011

WRIR Reports on Residential Stormwater Credits



Posted by Richmond VA Department of Public Utilities at 10:40 AM

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Monday, March 7, 2011

City Reduces Fluoride Levels in Drinking Water

The city of Richmond Department of Public Utilities has reduced the fluoride levels in the drinking water



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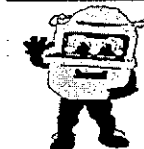
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treatment process from 0.90 milligrams per liter (mg/l) to 0.70 mg/l of water, effective March 1, 2011.

This comes as a result of a January 2011 recommendation from the U.S. Environmental Protection Agency (EPA) and the U.S. Department of Health and Human Services (HHS). In a joint press release, HHS proposed "that the recommended level of fluoride in drinking water can be set at the lowest end of the current optimal range to prevent tooth decay." This replaces the previous recommended range of 0.7 to 1.2 milligrams per liter. The reasons for the change include the increased access of Americans to more sources of fluoride. The new guidance updates and replaces recommendations provided in 1962 by the U.S. Public Health Service.

"Reducing the fluoride dose will not require a change in the city's drinking water treatment process and comes at no increase in cost," said Bob Steidel, director of the Richmond Department of Public Utilities. "Based upon the EPA and HHS recommendation, we want to ensure that we are doing everything we can to maximize the health benefits of our city's drinking water fluoridation process."

Dr. Donald Stem, Richmond City director of Public Health, noted that "the U.S. Centers for Disease Control considers water fluoridation one of the top 10 public health achievements of the 20th century due to its contribution to improved dental health. Extensive literature review has shown that the new fluoridation standard is best to prevent disease while avoiding excess fluoride exposure."

For more information about national and state drinking water regulations for fluoride, visit the EPA website, the Center for Disease Control, or the Virginia Office of Drinking Water.

Posted by Richmond VA Department of Public Utilities at 3:23 PM

1 comment: [Links to this post](#)

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Thursday, March 3, 2011

Plant More Plants

From HR Green

Unleash your green thumb and plant more to improve our local water quality. *Plant More Plants*, led by the Chesapeake Bay Program, encourages residents in Hampton Roads, Richmond, DC, and Baltimore to plant more plants and adopt conservation landscaping behaviors that mitigate the harmful effects of stormwater runoff and ultimately improve the health of the Chesapeake Bay.

HR Green is partnering with *Plant More Plants* to bring you helpful tips and plant inspiration. Check out the website plantmoreplants.com, the Facebook group Plant More Plants, or on Twitter @Growsomegood for steps you can take to improve the health of the Chesapeake Bay.

Posted by Richmond VA Department of Public Utilities at 3:59 PM

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Steidel Named DPU Director

WRIR Reports on Residential Stormwater Credits

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► January (2)

► 2010 (71)

► 2009 (53)

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- [Greening Virginia's Capitol](#)
- [Natural Gas Safety](#)
- [Plant More Plants](#)
- [Plant More Plants Blog](#)
- [Water Sense](#)

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Cut Your Stormwater Costs While Saving the River

Phil Riggan | Posted: Wednesday, March 27, 2013 10:00 am

If Mother Nature ever decides to allow Richmond to begin spring, maybe this is the year with your yard you spend a little money to save a lot of money -- and the river.

"Behavior changes on personal level will have the greatest effect on the health of the river," said Ryan Corrigan of the **James River Association**. "It is the smart thing to do for your wallet and the right thing to do for the river."

Homeowners and businesses can do simple things like install rain barrels, plant landscape beds at the end of your rain gutters that may cost a little extra upfront but should show a longer return on investment financially and for the health of the river.

A new study conducted by the James River Association and the **Center for Watershed Protection** provides local governments in the James River watershed with cost-effective solutions for meeting their stormwater pollution obligations under the Chesapeake Bay Cleanup.

By gathering and reviewing available cost and pollutant removal data for a variety of river friendly practices, from structural parking lot retrofits to installing rain gardens, the study was able to determine which actions provide the greatest pollution reductions for the lowest investment, according to the study. This data was then applied in the City of Richmond to develop a number of scenarios for addressing their required stormwater pollution reductions.

According to figures reported in January in the Richmond Times-Dispatch, stormwater fees are a big problem for many Richmonders and range from \$25 to \$70 per year for a single-family home to hundreds and thousands of dollars a year for churches, businesses and industrial properties.

Key findings from the study revealed that the average annual costs per pound of pollution removed can range from 44 cents to over \$1,500. Costs could be reduced by up to 85 percent if the City had additional flexibility to utilize some of the most cost effective practices that have not yet been officially "approved" by the EPA, and to be able to place practices on land beyond what the City owns itself.

Richmond's water and wastewater customers pay \$49.40 a month, the highest base charge in the area and, some argue, higher than most municipalities in the country, according to a recent Times-Dispatch article. The main reason for those high costs are the Richmond's efforts to make improvements to its Combined Sewer Overflow system, designed to capture untreated rainwater runoff during storms to prevent large amounts from reaching the James River.

Richmond received \$45 million from the 2013 General Assembly to address CSO improvements and

the budget includes nearly \$250 million toward addressing those pollution sources statewide, but first place to combat water quality issues is still at your home or business, Corrigan said.

“Fish grow on trees,” said Bill Street, CEO for the James River Association. They live off the water than runs off the land, how we care for the land is important to the health of aquatic life.

Report tackles cutting stormwater pollution cleanup costs

BY REX SPRINGSTON Richmond Times-Dispatch | Posted: Thursday, March 28, 2013 12:00 am

Rain washes dirt, oil, dog poop and other waste off parking lots, roads and yards. This is called stormwater pollution, and reducing it is one of the most expensive challenges Virginia faces in restoring the Chesapeake Bay and waters leading to it.

Local governments and their residents will bear most of that cost. But the price tag can be cut significantly — perhaps by 50 percent to 85 percent — if localities choose the most cost-effective measures, a new report says.

The James River Association, a Richmond-based conservation group, hired the Center for Watershed Protection, a Maryland-based nonprofit, to conduct the study. It was released Wednesday.

Among other things, the report found that restoring urban streams is a better, cheaper way to cut pollution than building detention ponds.

“As localities start looking into this, we believe there are a lot of cost savings that can be achieved,” said Bill Street, CEO of the James River Association.

Jeff Corbin, the Environmental Protection Agency’s senior adviser on the bay cleanup, called the report’s findings “pretty startling.”

“Of all the possible issues that could be seen as a thorn to localities with regards to the bay restoration, 99 percent of what we hear about are the costs associated with meeting stormwater goals,” Corbin said.

An 85 percent cut in costs could be optimistic, Corbin said, “but I’ll take a 50 percent reduction happily.”

The report said, “Initial cost estimates for addressing stormwater pollution in Virginia are approximately \$10.5 billion — over half the total cost of cleaning the Chesapeake Bay.”

Those costs can be cut significantly if localities focus on restoring urban streams, repairing sewer line leaks and creating programs to get people to pick up after their pets, the report said.

Restoring urban streams involves measures such as regrading their banks and installing rocks to limit erosion. A stream restoration costs 44 cents a year on average per pound of pollution removed, the report said.

On the other hand, building detention ponds, which are designed to slow the flow of rainwater, can cost \$157 a year per pound of pollution removed, the report said. And some programs aimed at reducing fertilizer use on private land can cost \$1,500.

Pollutants studied in the report include nitrogen and phosphorus, which come from animal waste and fertilizer, among other sources. They fuel the growth of algae that foul rivers and the bay.

rspringston@timesdispatch.com

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NEWS & FEATURES - NEWS AND FEATURES

September 15, 2004

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Plugged Up

Drains, pumps and disbelief: The realities of engineering in the wake of Gaston.

BY [SCOTT BASS](#) @SCOTTBASS

Underground, the players are big and familiar. Shockoe Sewer, also known as "the arch," is 27 feet in height and runs all the way to the top of the valley. There's the Shockoe Box, another main drainage system that is shorter, from the flood wall to Main Street Station. And there's the East Gravity Outlet, the main grated drain that sits at ground level, in front of the Canal Walk sidewalk and a few hundred feet from the flood wall.

Above ground, it's a concrete jungle.

In the parking lot across the street, the Dock Street Pump Station sits like a huge windowless gray post, obscuring the giant machines that when powered kick 75,000 gallons of water and sewage out through a 60-inch pipe every minute. Sometime during the night of Aug. 30, probably around 8, Virginia Power shut off power in the area to reduce risk of electrical shock to those trapped in the storm. But it knocked out the giant pumps, too. There is no backup generator.

It's a massive drainage system that is capable of handling an impossible amount of water, insists Hay, who bewilders himself when talking about the destructive power of Gaston. This storm dumped more rain on the Bottom than anyone could have imagined. Hay says it's probably the biggest rainwater flood in Richmond's history. He likens its unthinkable and unexpected nature to Sept. 11, 2001, when the Twin Towers were knocked out of the sky by terrorist planes.

Who could plan for such a thing?

"It wasn't a small plane, it was a jumbo jet of a flood," he says, his eyes widening. "You cannot be prepared for something of this magnitude."

Indeed, as the multimillion-dollar cleanup of the Bottom continues, and many businesses face the reality of closing shop for good, the finger pointing continues. All manner of possible conspiracies emerge: The gates were closed, trapping the water inside; someone forgot to turn on the giant pumps; the flood wall trapped the water north of the James River, actually causing the Bottom to flood.

"A lot of people assume the flood wall was closed," says Hay, referring to the gates. "Oh no, they were open."

All the above-ground gates were open, says Hay, as they always are unless there's river flooding. Below ground, where gates are more often closed to keep sewage from seeping into the river, gates were open by about 5 p.m.

The underground gate for the arch was open before the storm started and at 4:30. The Shockoe Box gates were opened as well, allowing the storm water and sewage to drain into the river. (Most unsanitary sewage was drained into a giant 44 million-gallon retention basin during what Hay calls the "first flush.")

With water traveling at approximately 165,000 gallons per second down Shockoe Valley — for engineering types, that's about 20,000 cubic feet of water per second compared to the mere 2,000 cubic feet of water per second trickling down the James River — there was nothing anyone could do.

S. Pierce Brinkley, operations manager for the Richmond Riverfront Corp., insists that the flood wall prevented a lot more deaths and injuries. Because it bottled up the water, more personal property — and possibly people — avoided being washed violently into the James River.

Years ago, when the first flood-wall engineers were designing the \$135 million flood wall, the engineers told city officials that the flood wall could create problems during a major rain storm, recalls Don Charles, former city engineer and architect, and now chief executive of the Historic Richmond Foundation.

"I remember very distinctly," Charles says of the engineers' warnings about "back-of-the-wall flooding."

Charles L. Dunn, who oversaw construction of the flood wall as flood-wall coordinator for the city of Richmond from 1986 to 1995, says it wasn't built to handle more than a foot of rain in eight hours.

"It's the worst possible scenario," Dunn says, adding that the flood wall was built to handle just more than a 100-year storm. What Richmond got was a 500-year storm.

The freak nature of Gaston doesn't mean there should be wholesale changes, either, Dunn suggests.

Take one of the commonest suggestions — put a backup generator on top of the Dock Street Pump Station, for example. But not only would a generator capable of moving those giant pumps be massively expensive, it's difficult to know if such a generator would have made any difference during Gaston.

It certainly would have helped pump the water out of the Bottom once the rain stopped. But during the storm, Brinkley says, it wouldn't have made much difference. The water was coming down the stream too fast.

Perhaps opening the existing pedestrian walkway through the floodwall, underneath the banners at the end of the Canal Walk, would have helped with draining the water. Other than that, there's not much else that could have been done, Brinkley says. Hay and Dunn concur.

If there is a lesson from the storm, Hay says, it's that the city needs an evacuation plan for the Bottom. The city has no such plan, he says, and as a result many people were caught off guard, and a few killed.

"Nobody seems concerned about an evacuation plan," Hay says. S

Letters to the editor may be sent to: letters@styleweekly.com

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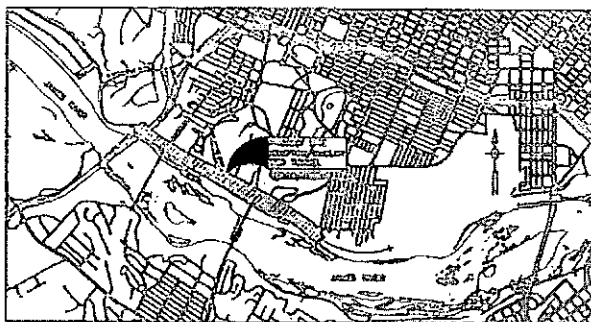
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Street Talk

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FRIDAY, DECEMBER 6, 2013

Anyone Want to Clean the Leaves Out of Richmond's Giant Poop Tunnel?

POSTED BY [NED OLIVER](#) ON FRI, DEC 6, 2013 AT 11:27 AM[click to enlarge](#)

City of Richmond
A city map shows the location of the Hampton-McCloy tunnel. Maymont is located behind the locator tag. You can find more maps [here](#).

Maybe you know this already, but the city has a 7.5 million gallon underground holding tunnel for "combined sewer overflow" or, in layman's terms, poop water. It's next to the James, is wide and tall enough to drive a tractor trailer through, and runs 1.3 miles from the Powhite bridge east under Maymont to Hampton Street.

It's an impressive feat of engineering, and in most cases allows the city to avoid dumping untreated sewage into the river when storm water overwhelms the city's old-timey plumbing. But it also went online in 2003 and, after 10 years of service, it's starting to get jammed up with leaves.

This week the city put a call out to try to find someone to get in there and clean it out. The city is estimating that about 600 cubic yards of debris have built up -- the equivalent of roughly 230,000 two-liter bottles of soda. All that junk is blocking pumps and affecting capacity, according to an invitation to bid put out by the city's Department of Procurement Services.

Excitingly, the city is requiring whichever contractor wins the job to provide video proof that it's been cleaned, which, presumably means that said video will become public record.

If you're curious, the city's website has a [ton of information](#) about how the combined sewer overflow system works, including a [very helpful animation](#) showing the aforementioned holding tunnel in action.

God's speed brave tunnel cleaners.

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So it can pump poop but not leaves?

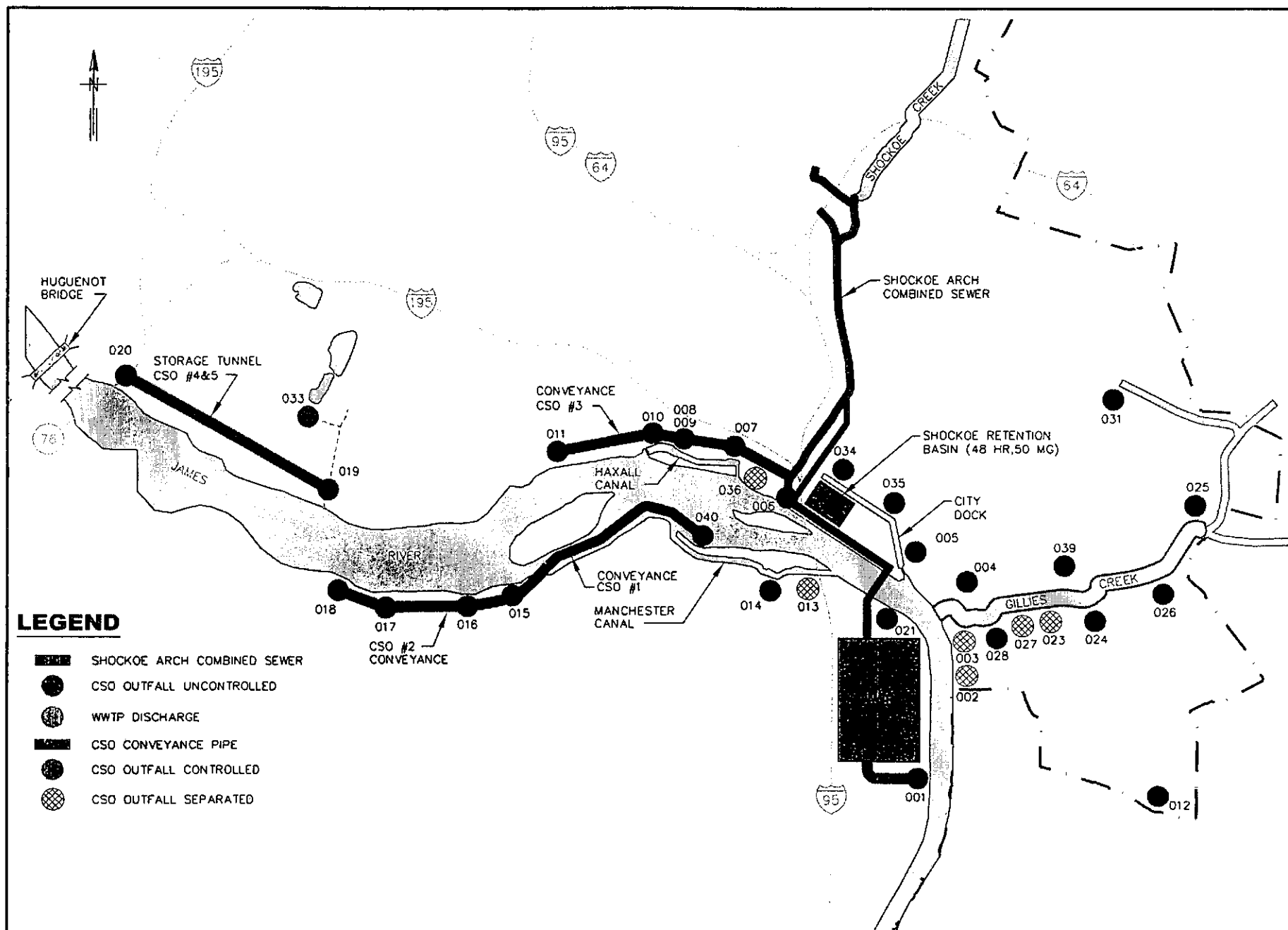
report

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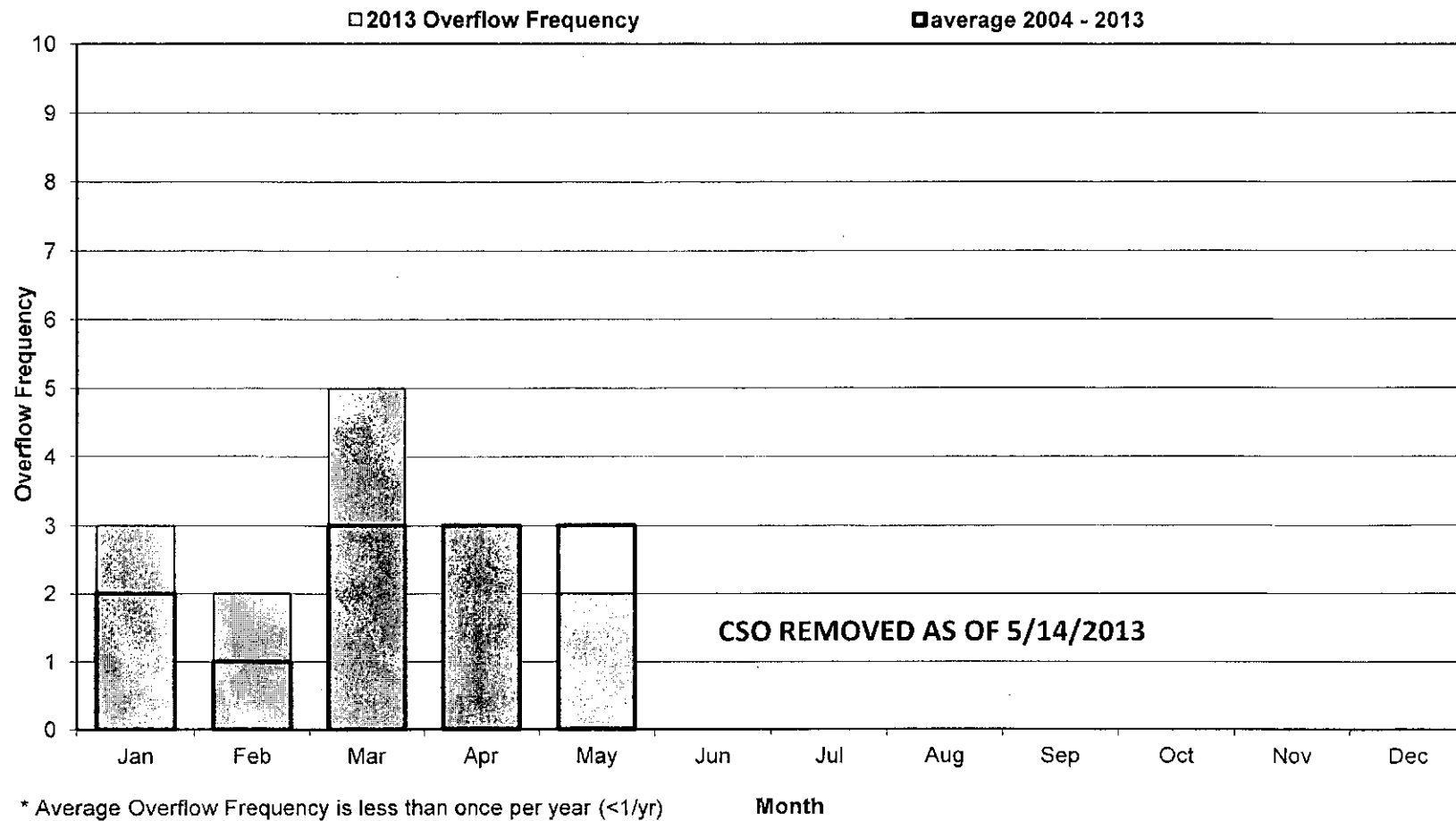
Combined Sewer System Report for 2013

APPENDIX 11-2

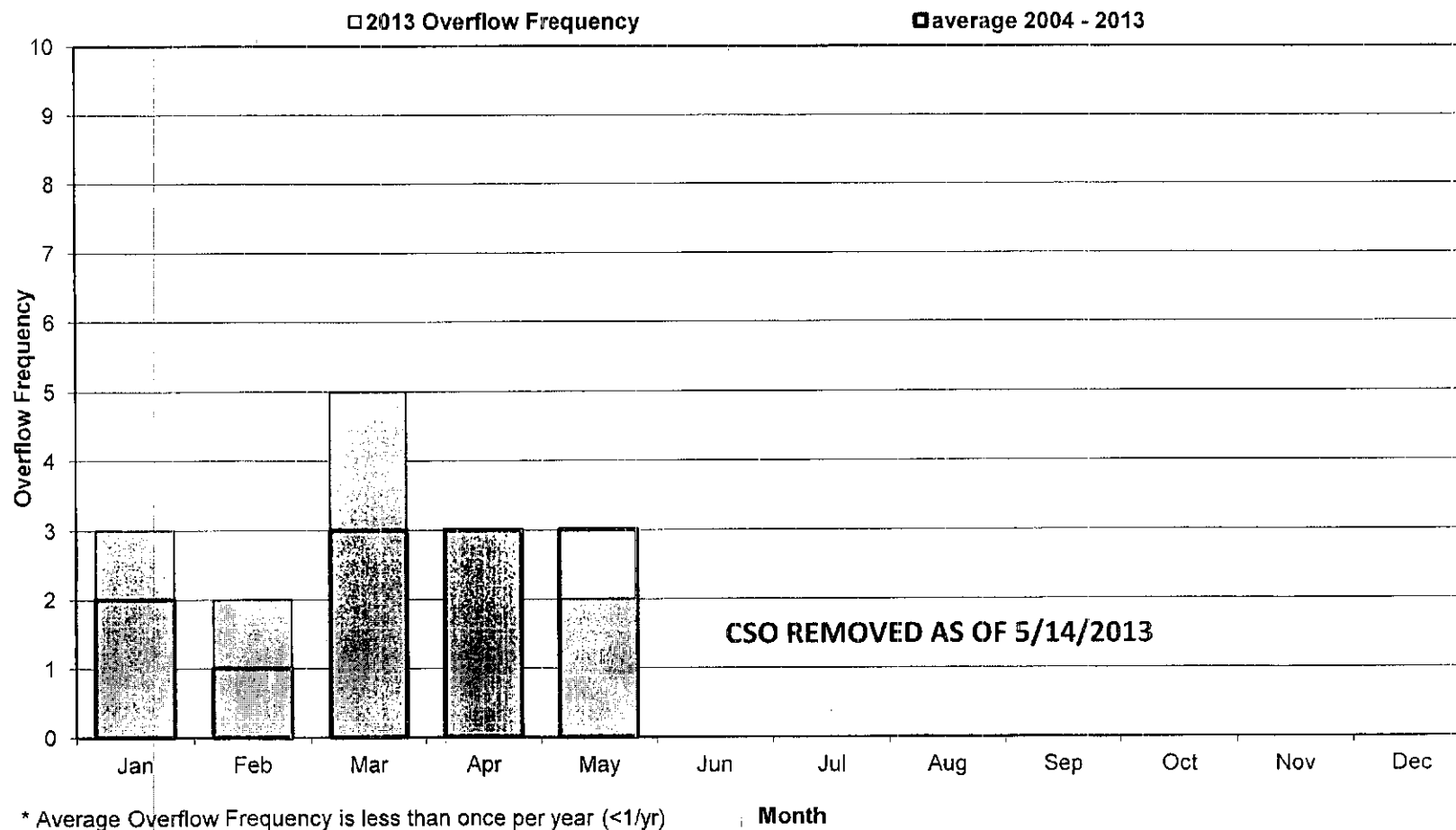
CSO Overflow Reporting



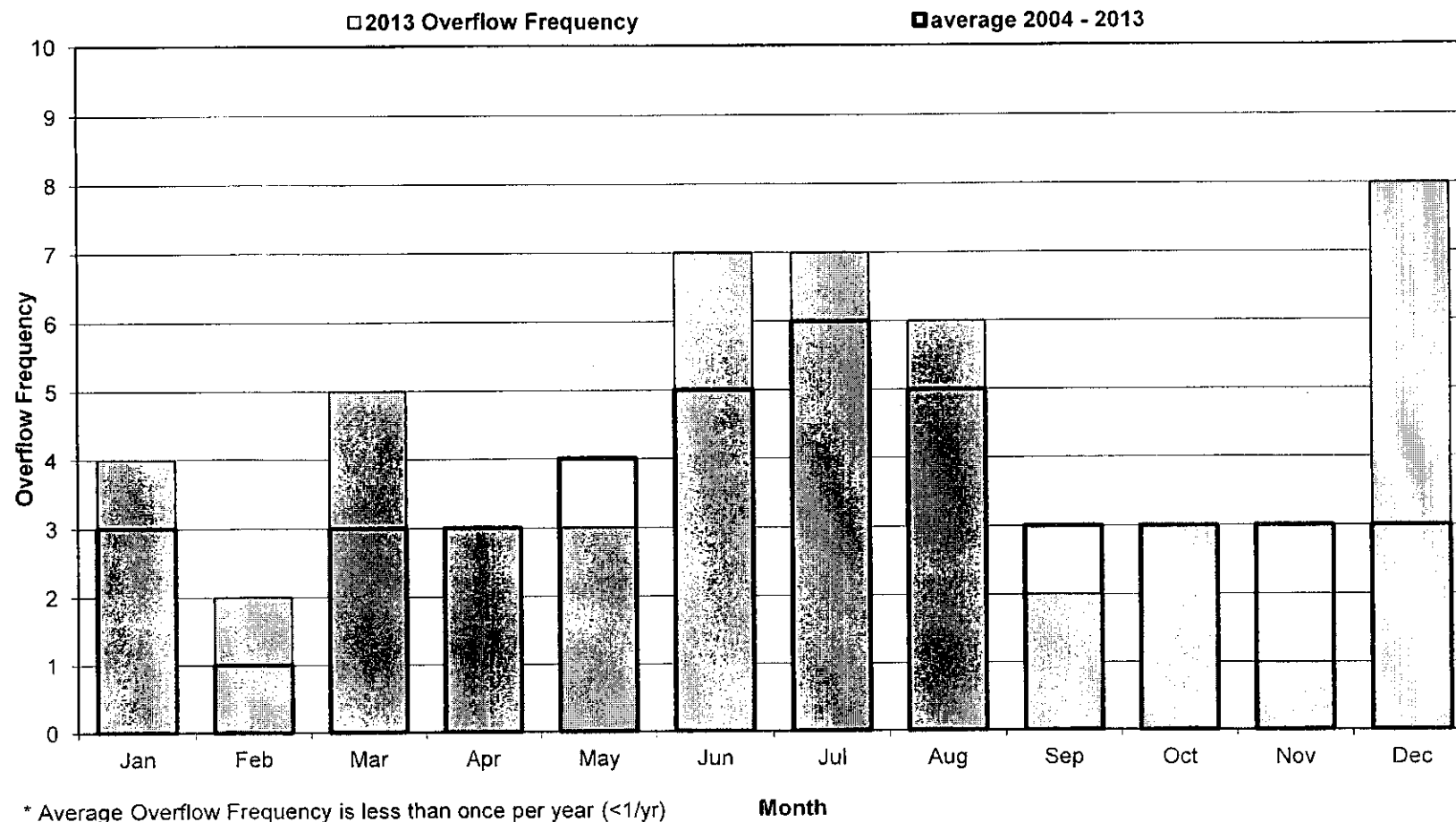
City of Richmond, Virginia
Overflow Frequency by Month
CSO02 - Orleans 2004-2013



City of Richmond, Virginia
Overflow Frequency by Month
CSO03 - Nicholson 2004-2013

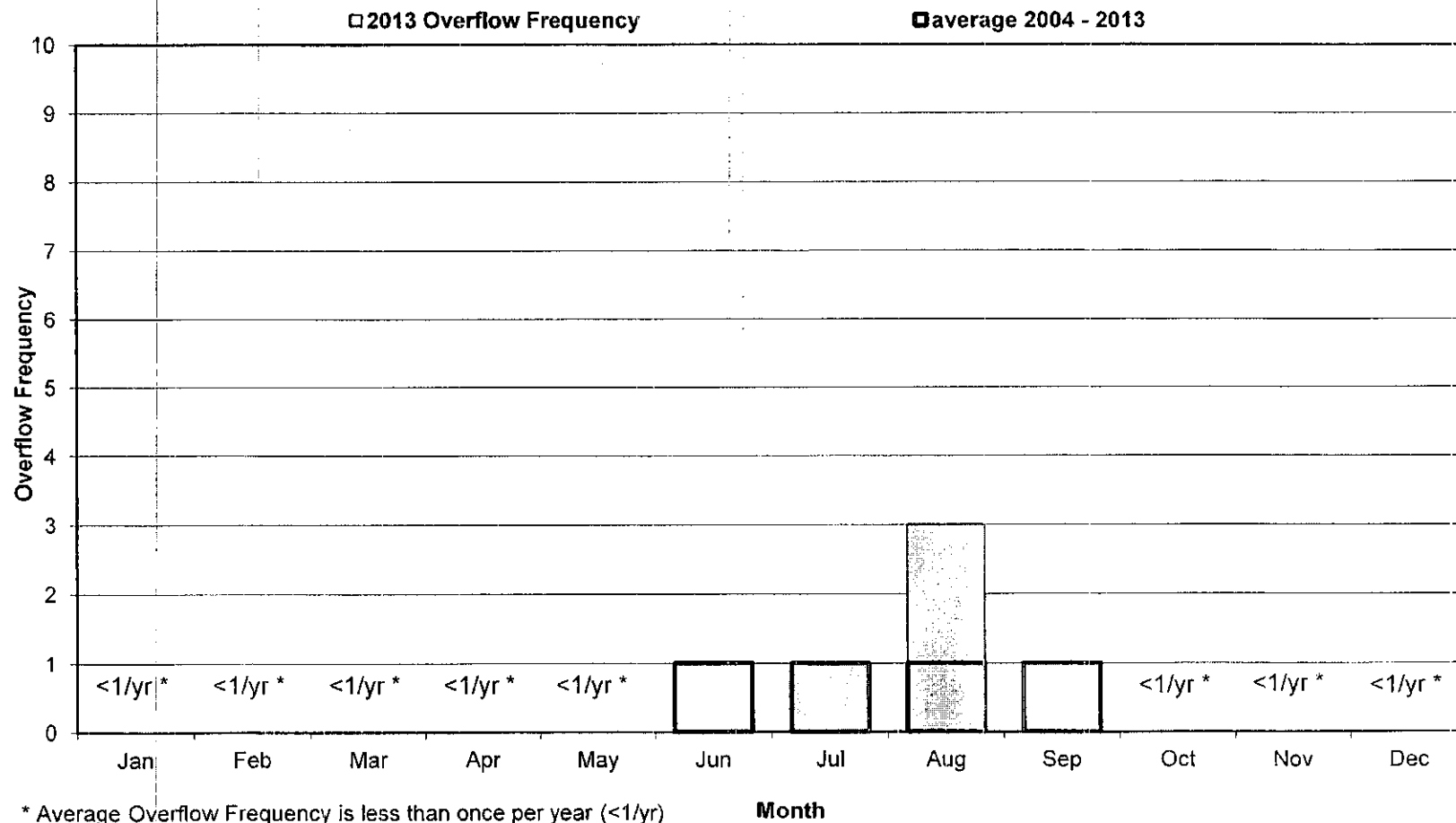


City of Richmond, Virginia
Overflow Frequency by Month
CSO04 - Bloody Run 2004-2013

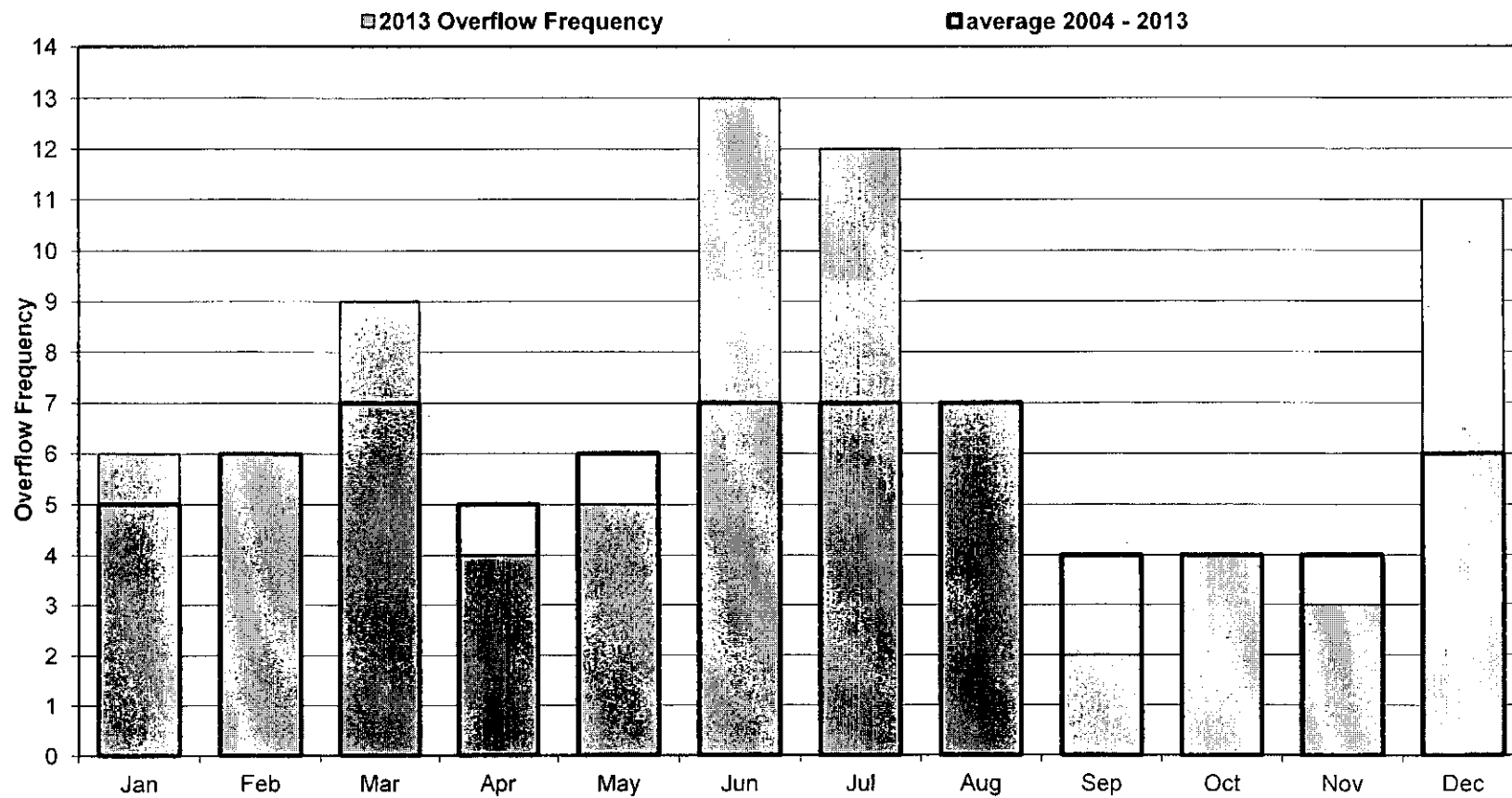


City of Richmond, Virginia
Overflow Frequency by Month

CSO05 - Peach Street 2004-2013



City of Richmond, Virginia
Overflow Frequency by Month
CSO06 - Shockoe 2004-2013

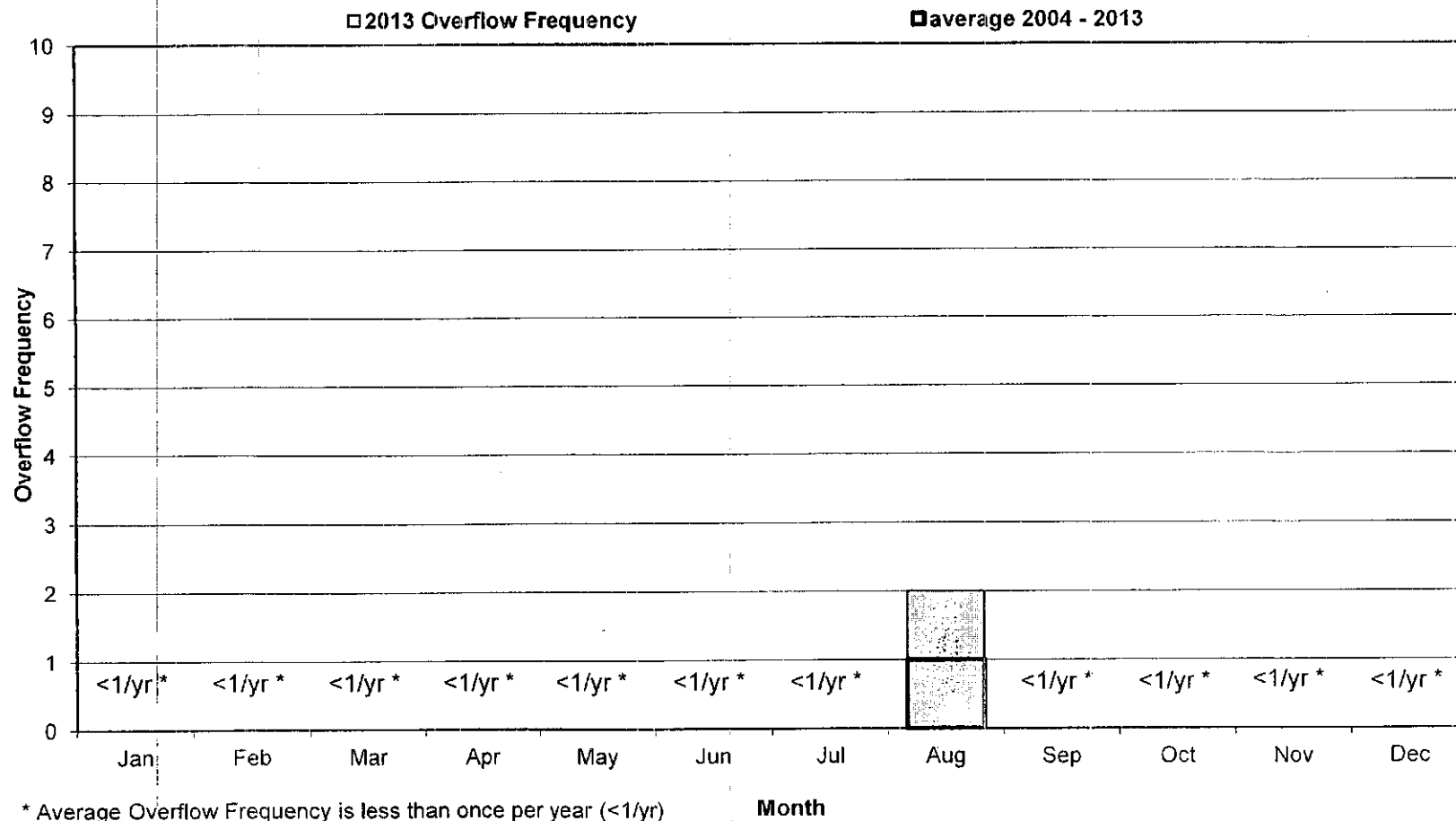


* Average Overflow Frequency is less than once per year (<1/yr)

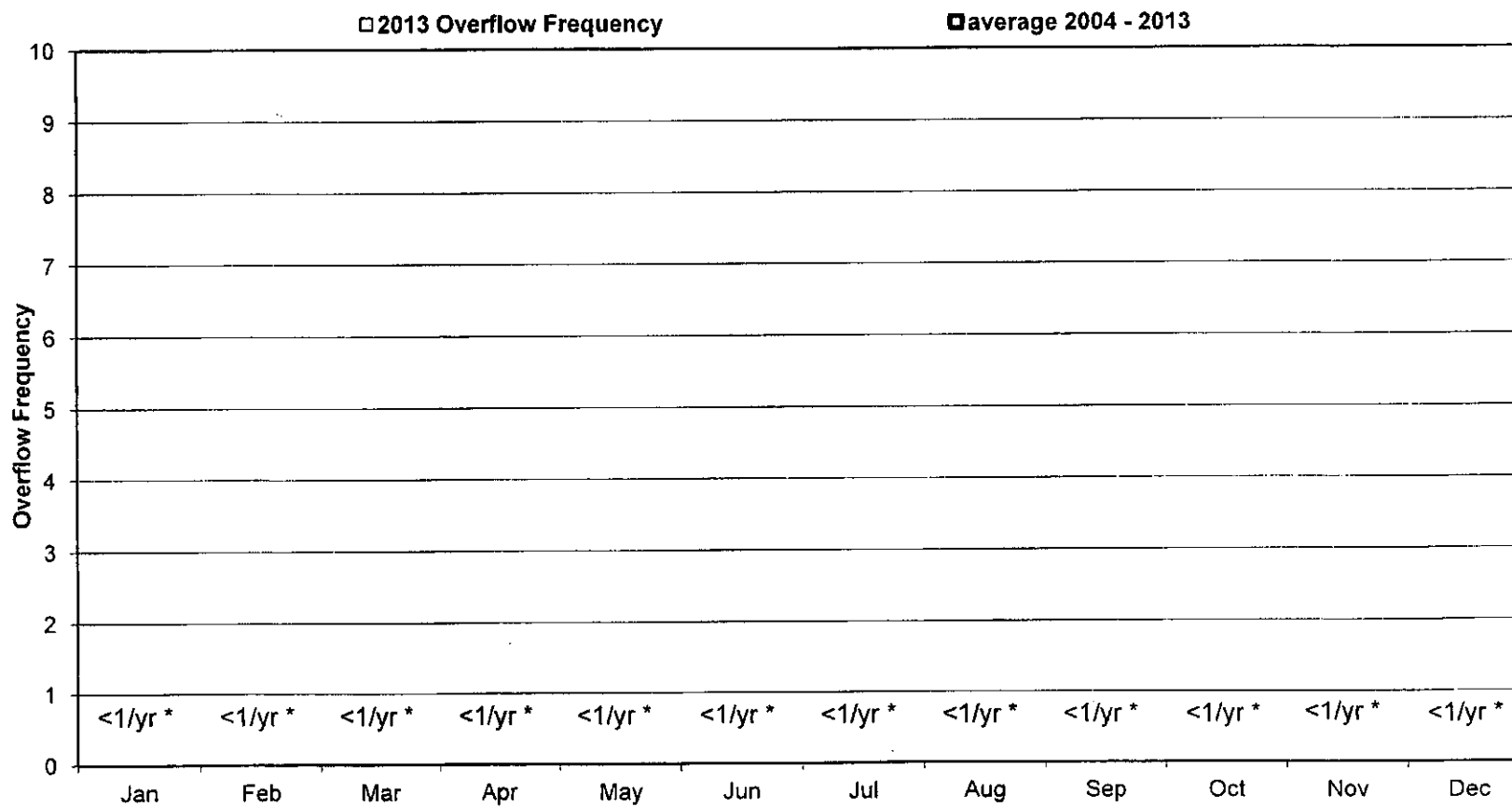
Month

City of Richmond, Virginia
Overflow Frequency by Month

CSO07 - Byrd 2004-2013



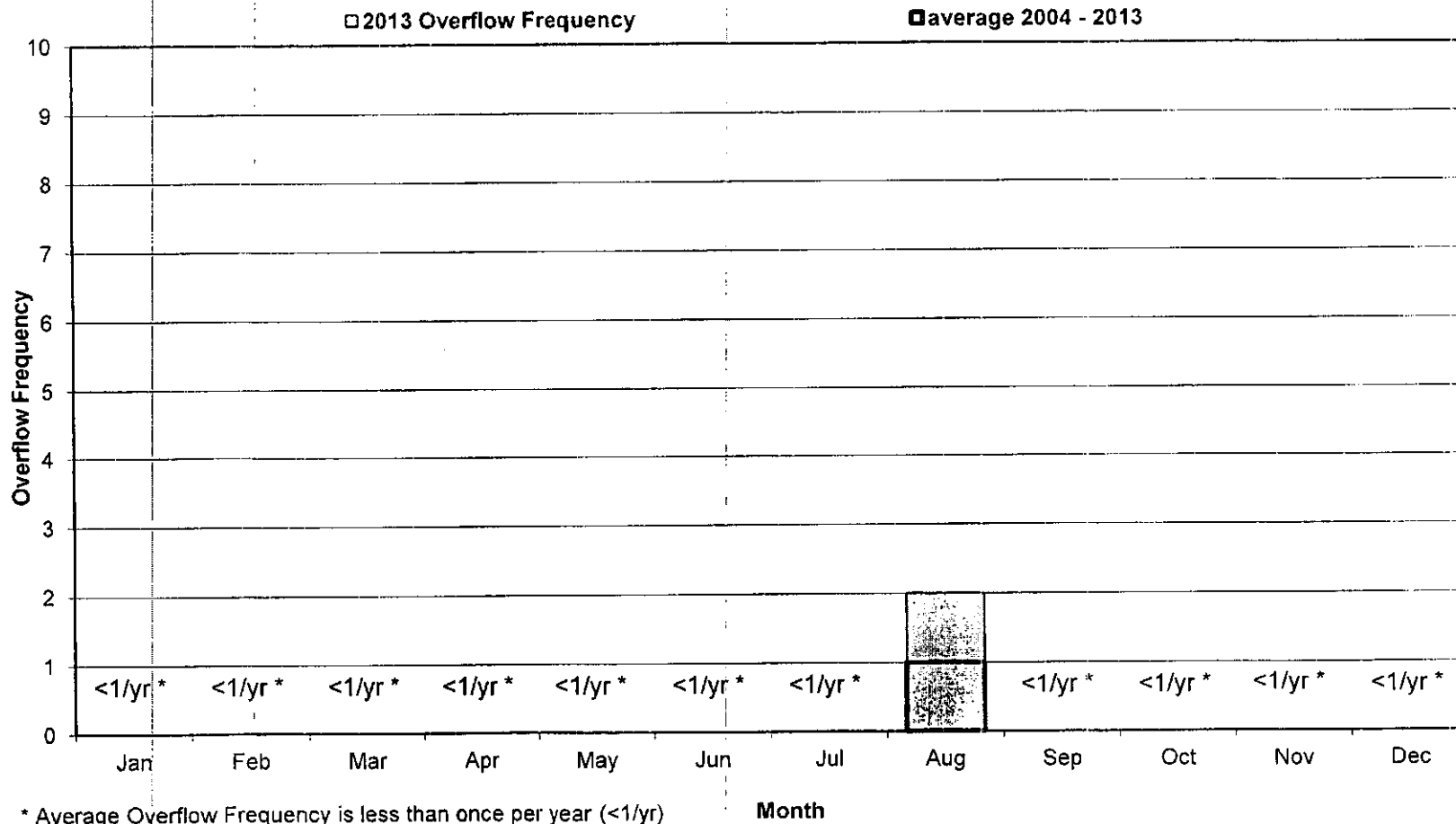
City of Richmond, Virginia
Overflow Frequency by Month
CSO09 - 7th Street 2004-2013



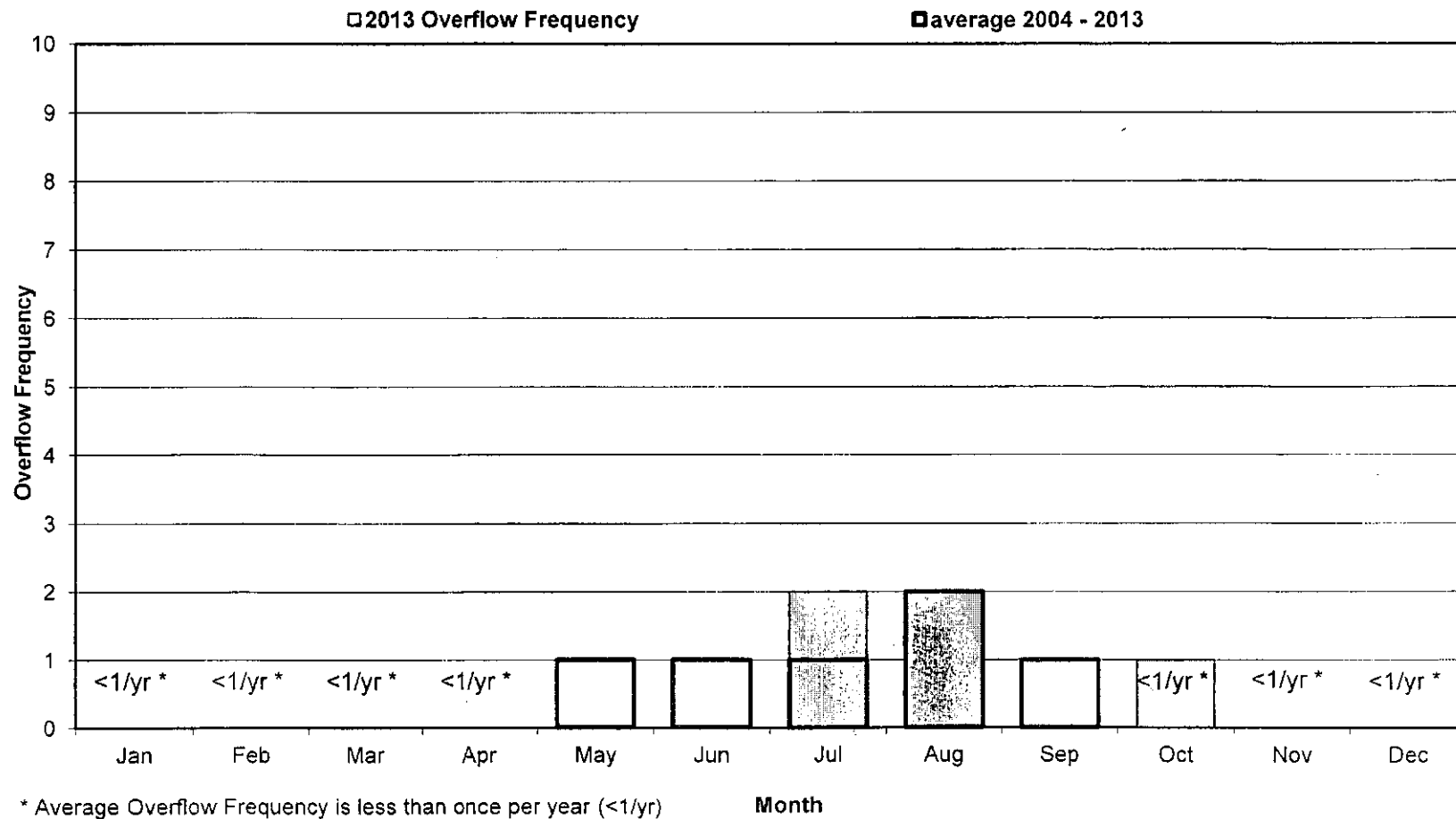
* Average Overflow Frequency is less than once per year (<1/yr)

Month

City of Richmond, Virginia
Overflow Frequency by Month
CSO10 - Gambles Hill 2004-2013

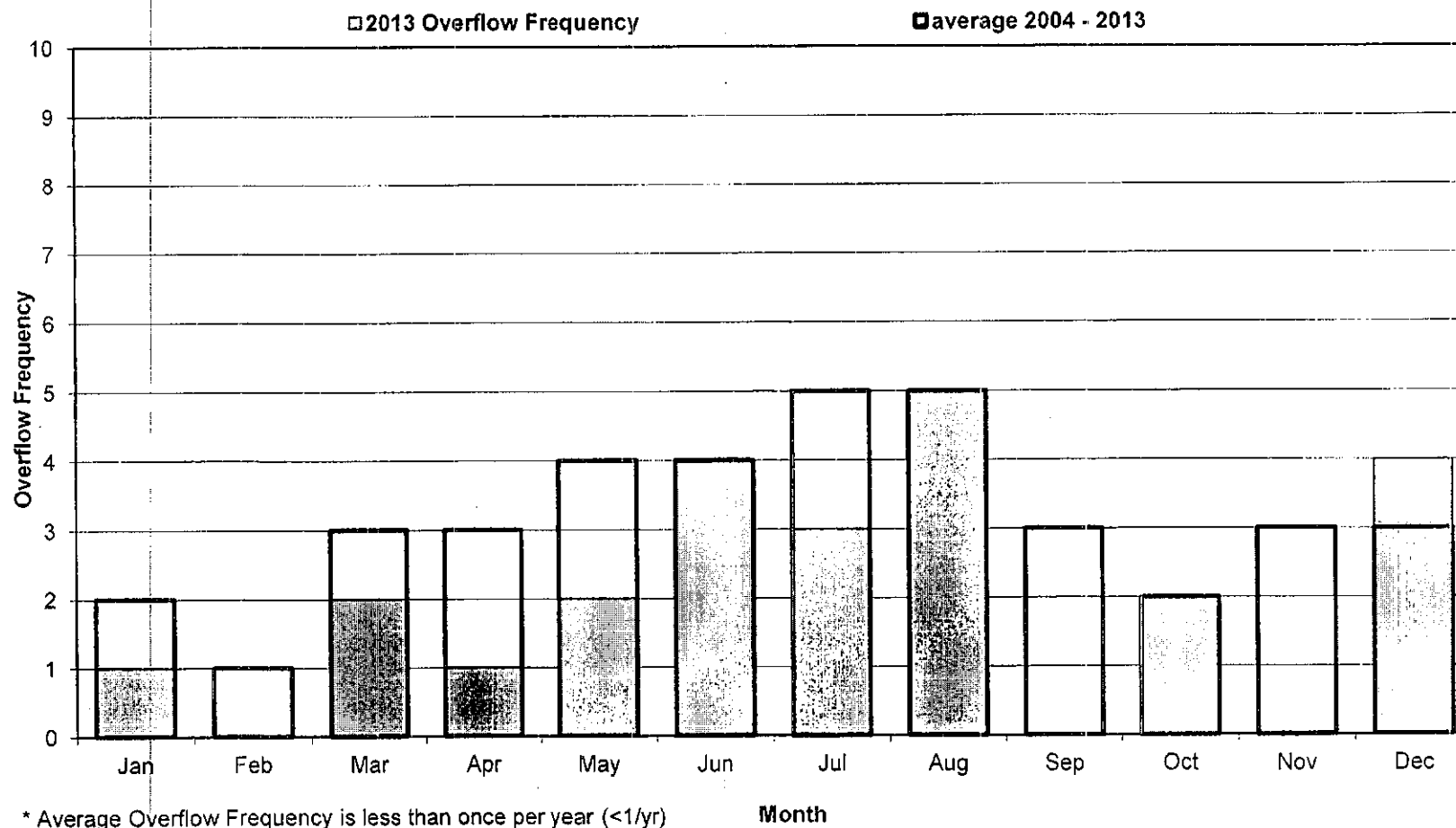


City of Richmond, Virginia
Overflow Frequency by Month
CSO11 - Park Hydro 2004-2013

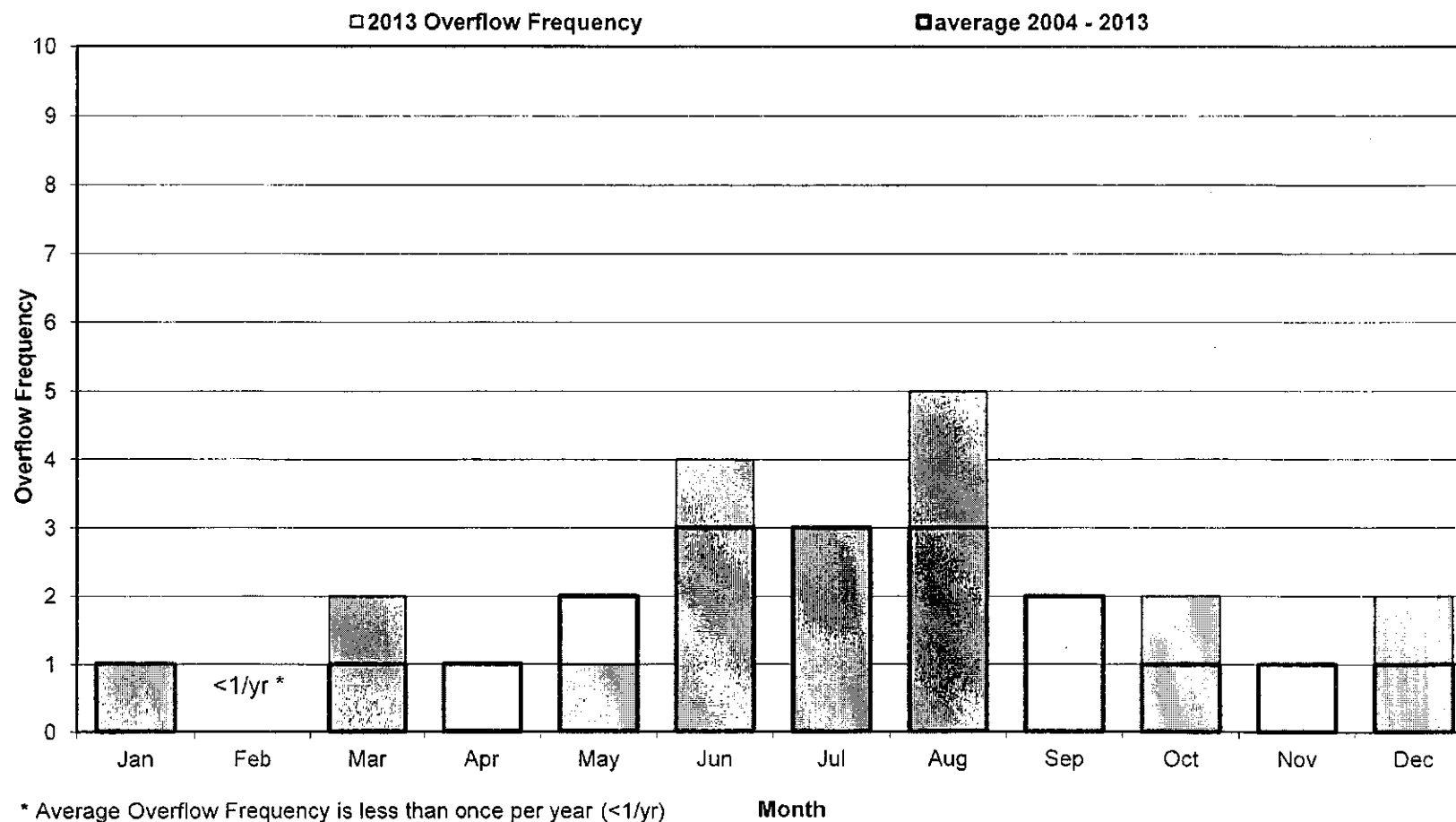


City of Richmond, Virginia
Overflow Frequency by Month

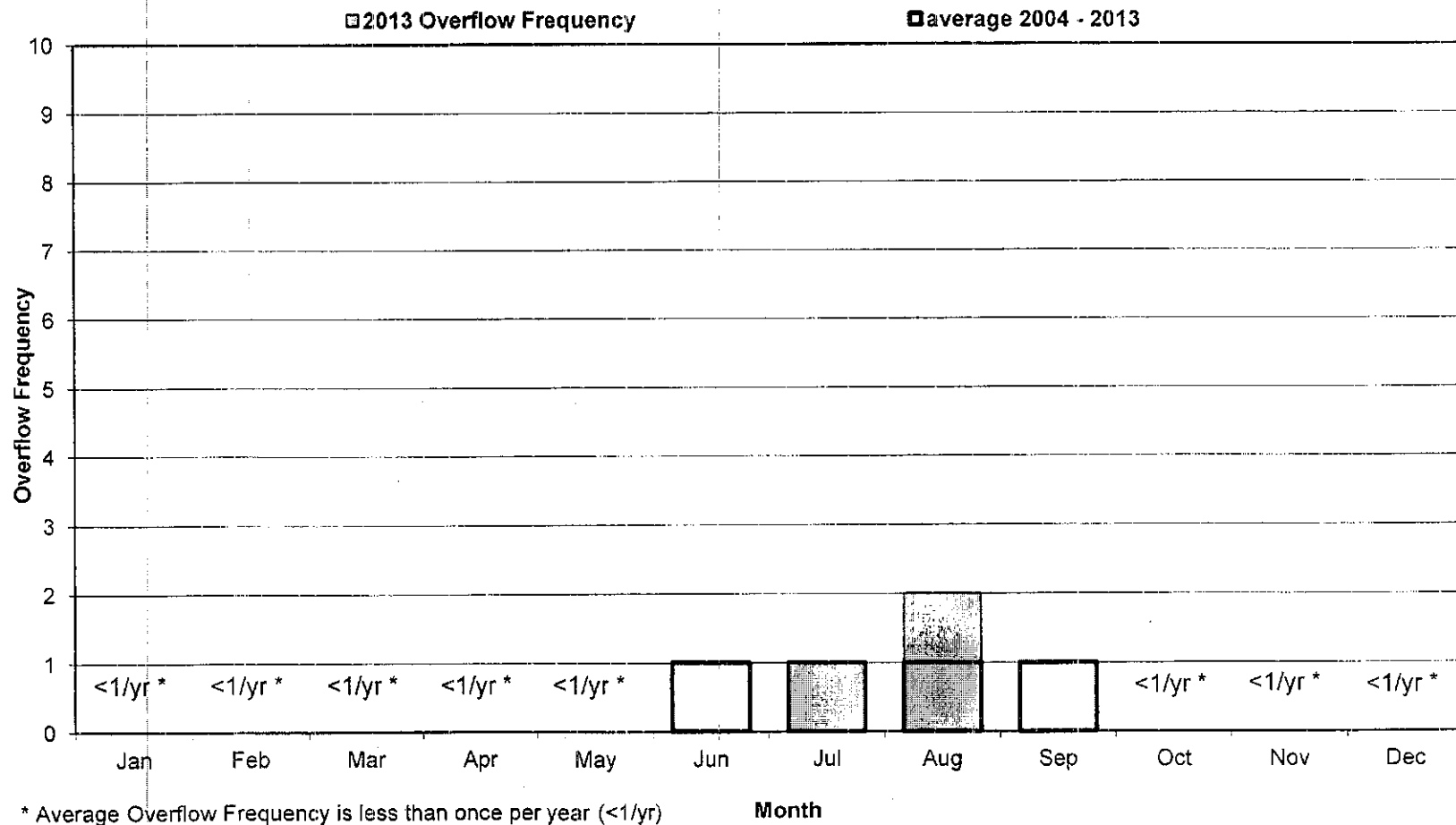
CSO12 - Hilton Street 2004-2013



City of Richmond, Virginia
Overflow Frequency by Month
CSO14 - Stockton 2004-2013

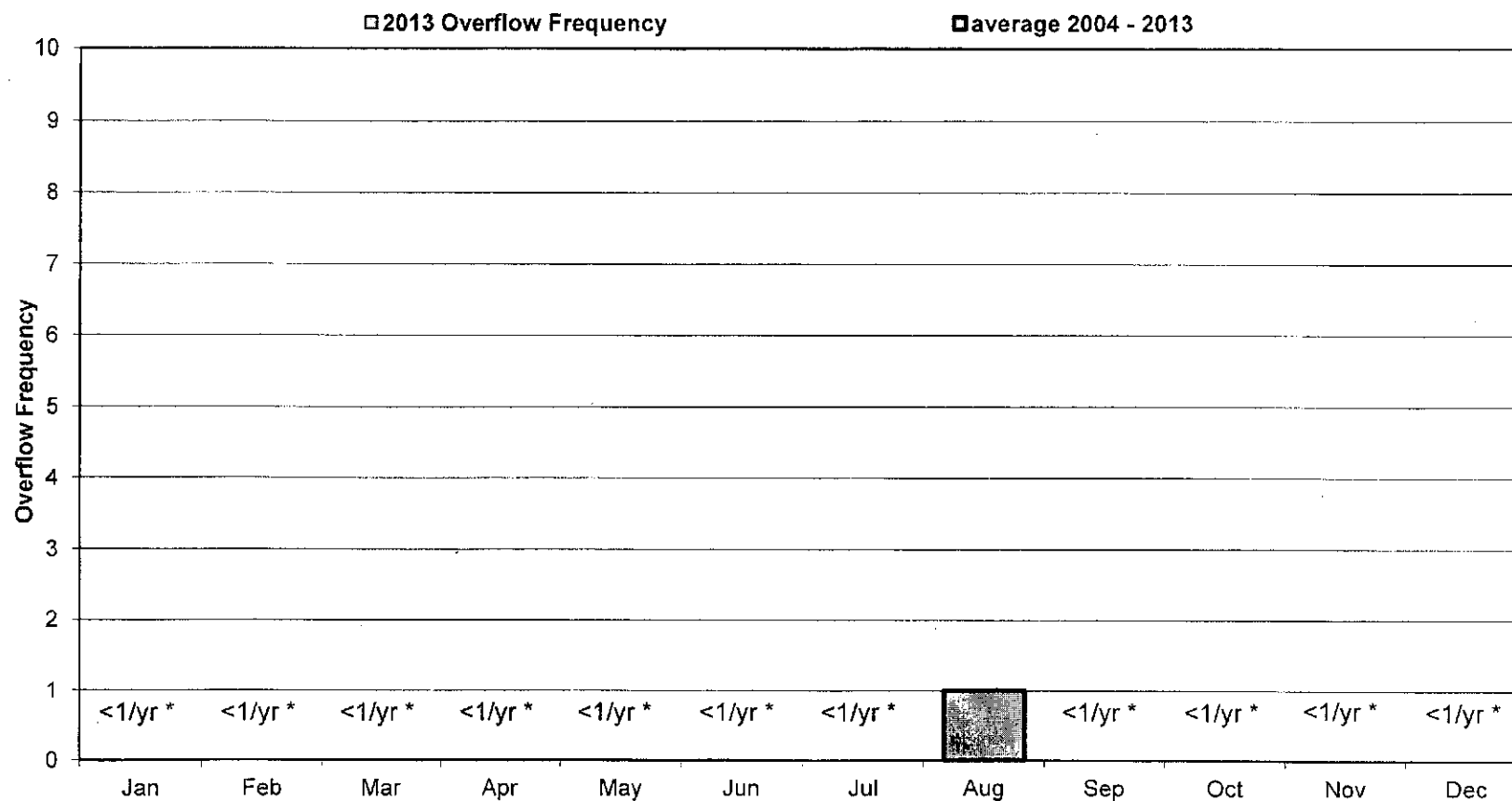


City of Richmond, Virginia
 Overflow Frequency by Month
CSO15 - Canoe Run 2004-2013



City of Richmond, Virginia
Overflow Frequency by Month

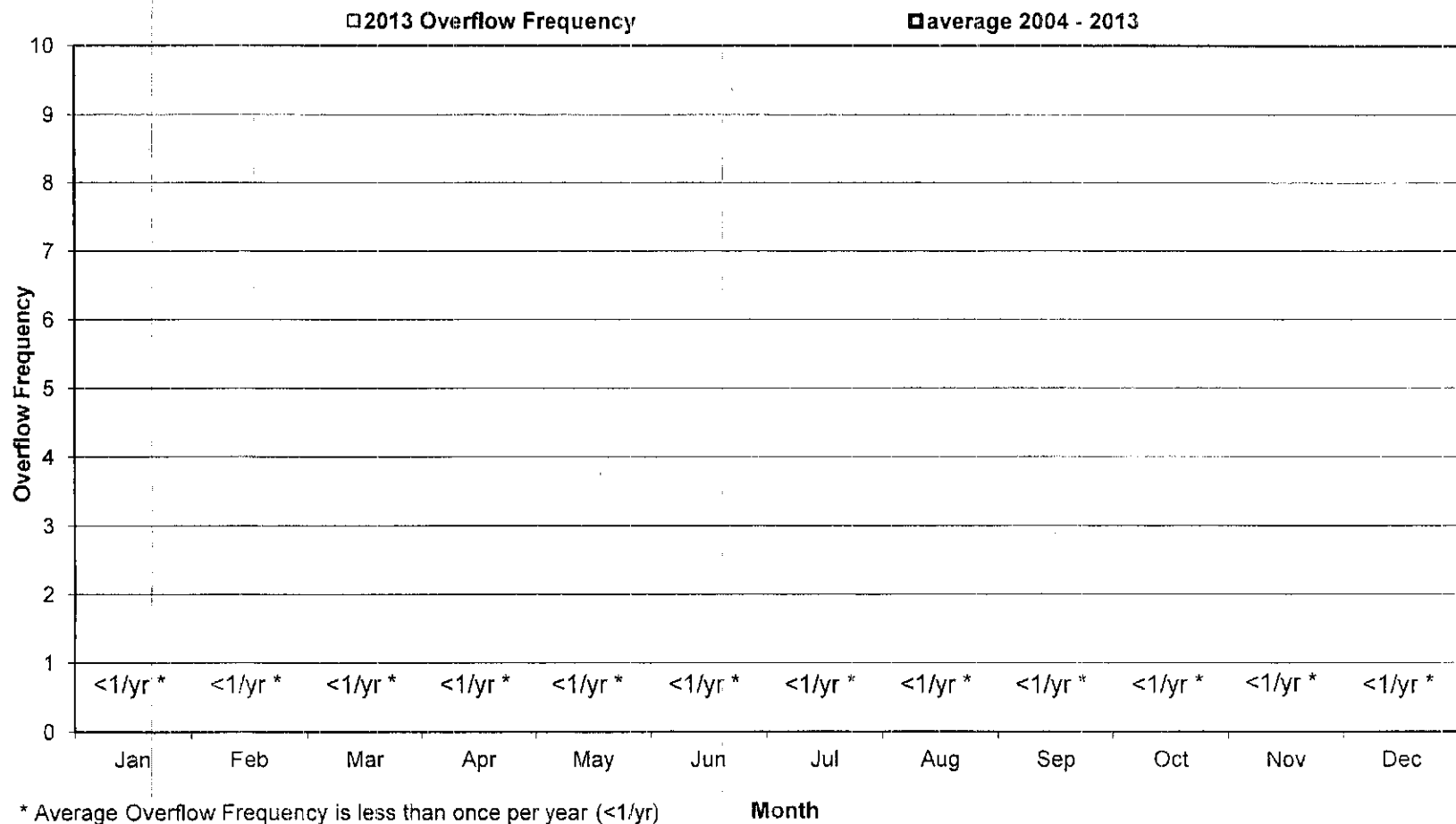
CSO16 - Woodland 2004-2013



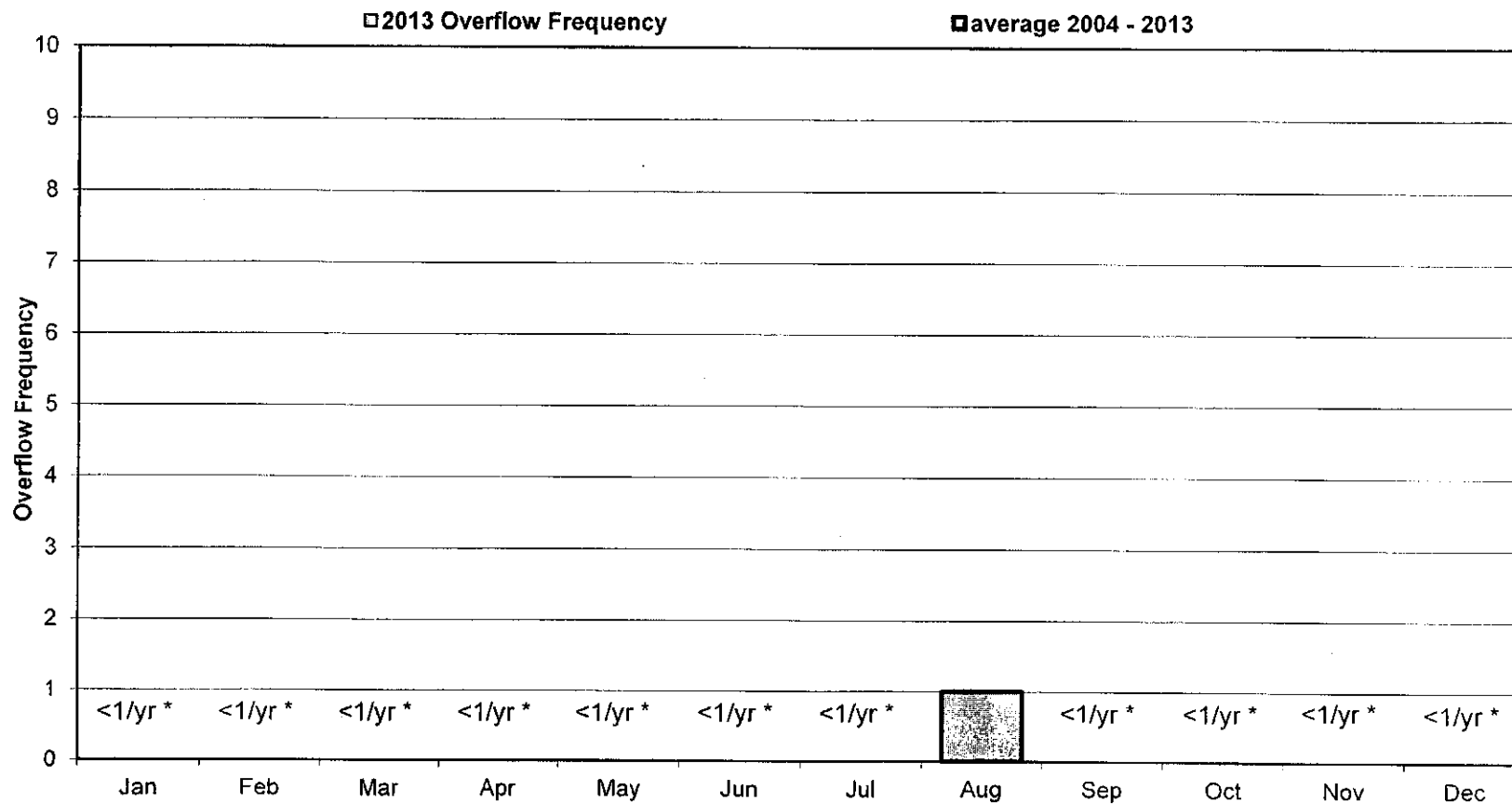
* Average Overflow Frequency is less than once per year (<1/yr)

City of Richmond, Virginia
Overflow Frequency by Month

CSO17 - Reedy Creek 2004-2013



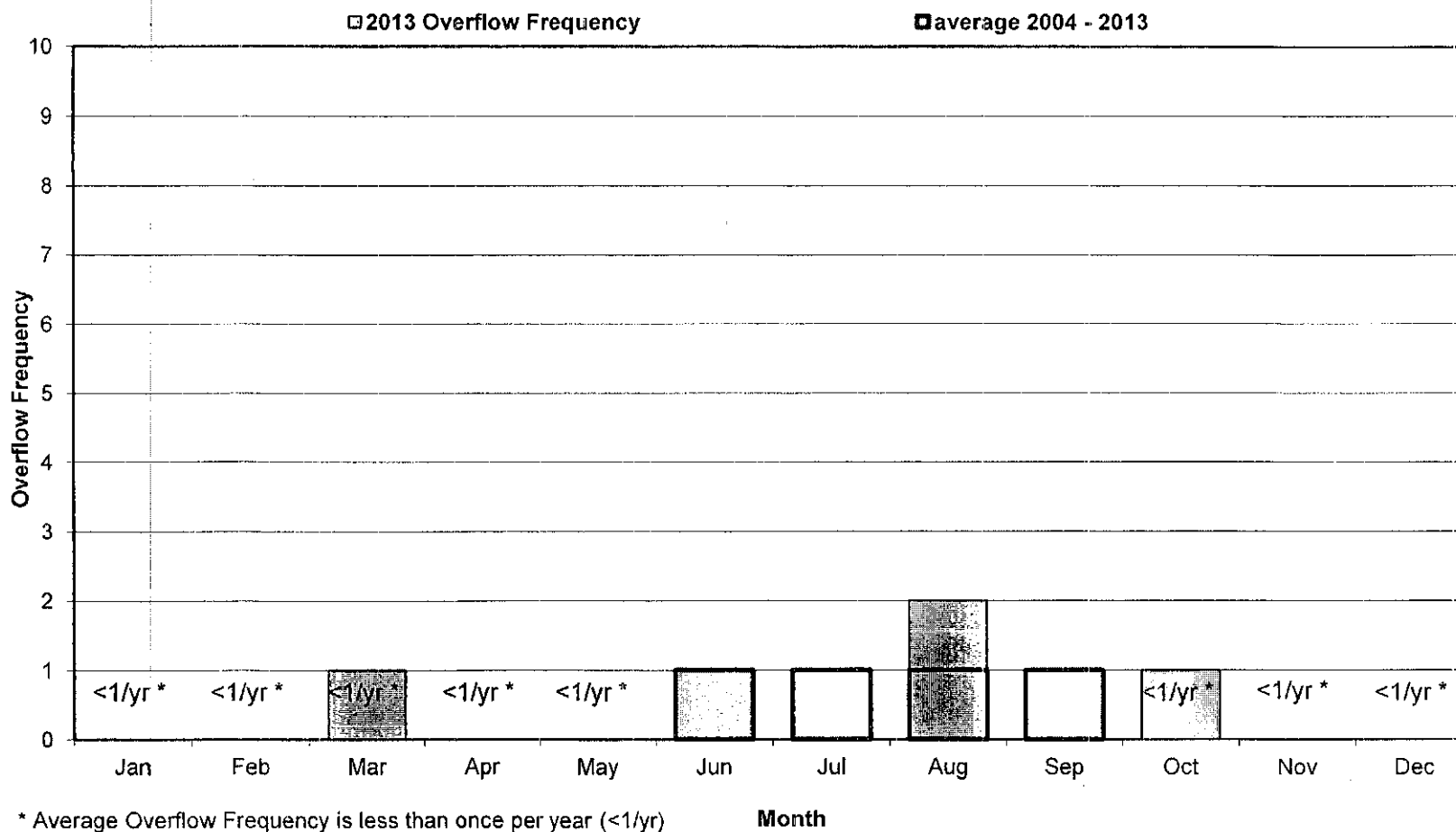
City of Richmond, Virginia
 Overflow Frequency by Month
CSO18 - 42nd Street 2004-2013



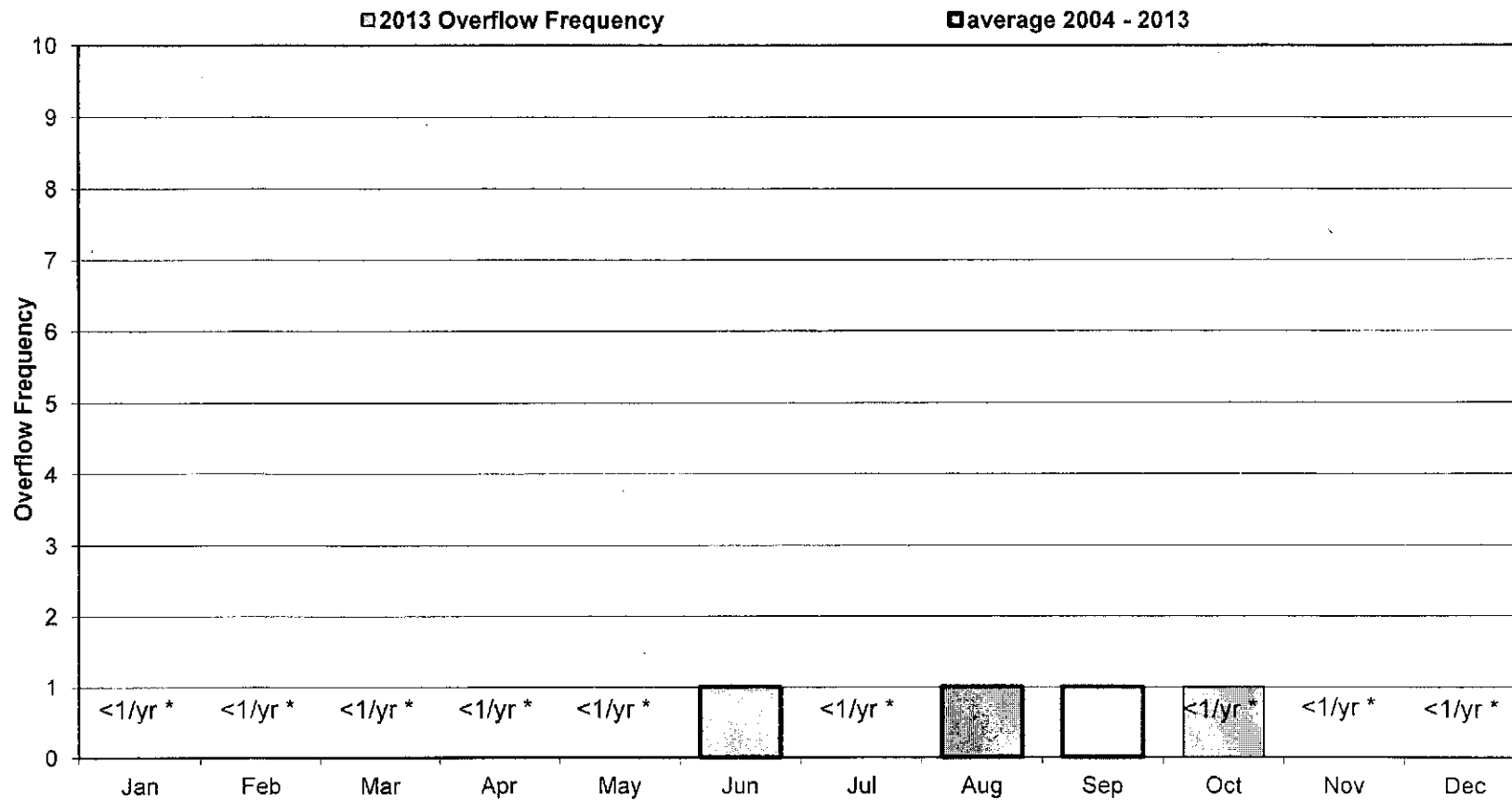
* Average Overflow Frequency is less than once per year (<1/yr)

Month

City of Richmond, Virginia
Overflow Frequency by Month
CSO19 - Hampton 2004-2013



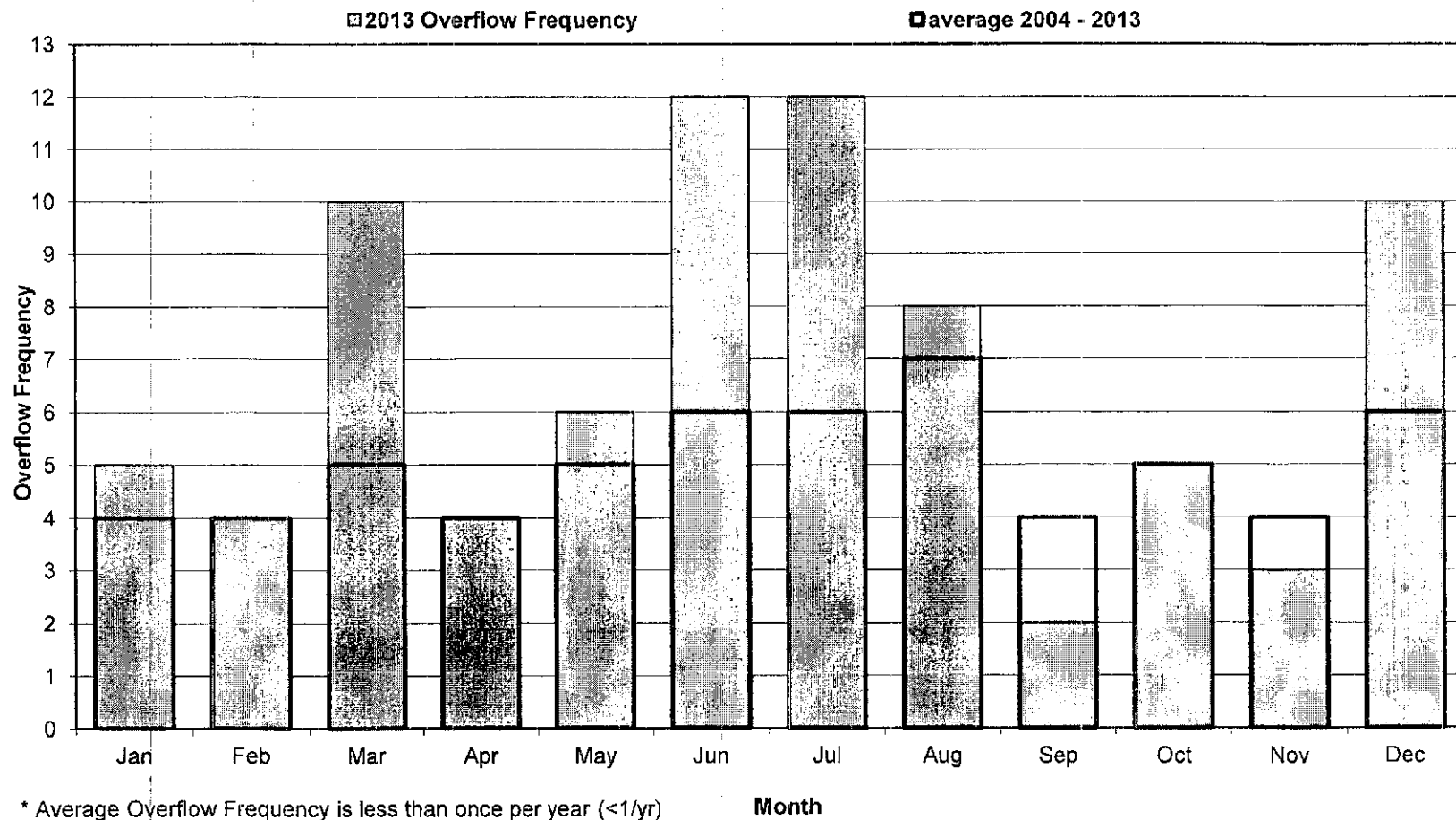
City of Richmond, Virginia
Overflow Frequency by Month
CSO20 - Mc Cloy 2004-2013



* Average Overflow Frequency is less than once per year (<1/yr)

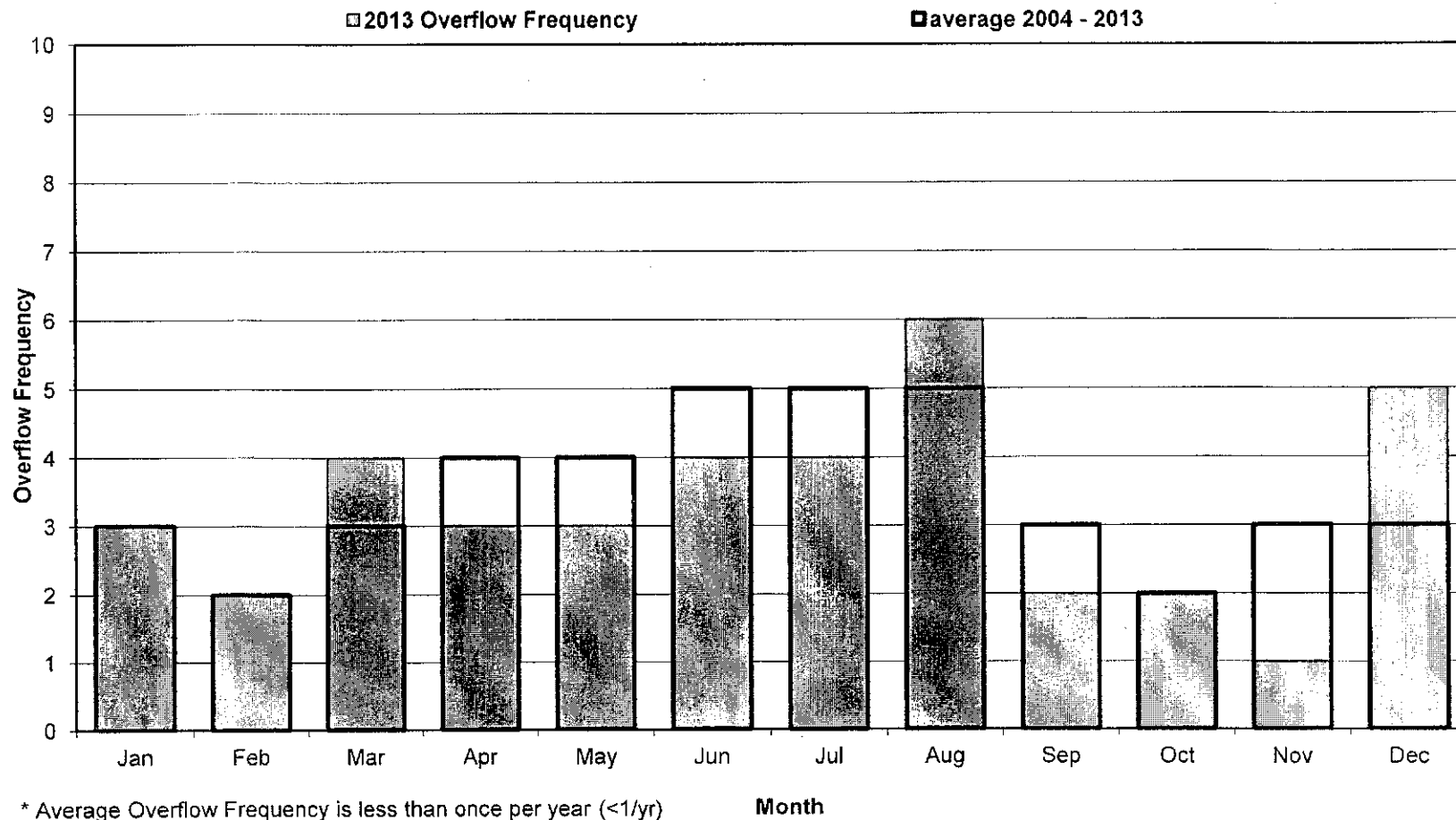
Month

City of Richmond, Virginia
Overflow Frequency by Month
CSO21 - Gordon Ave 2004-2013



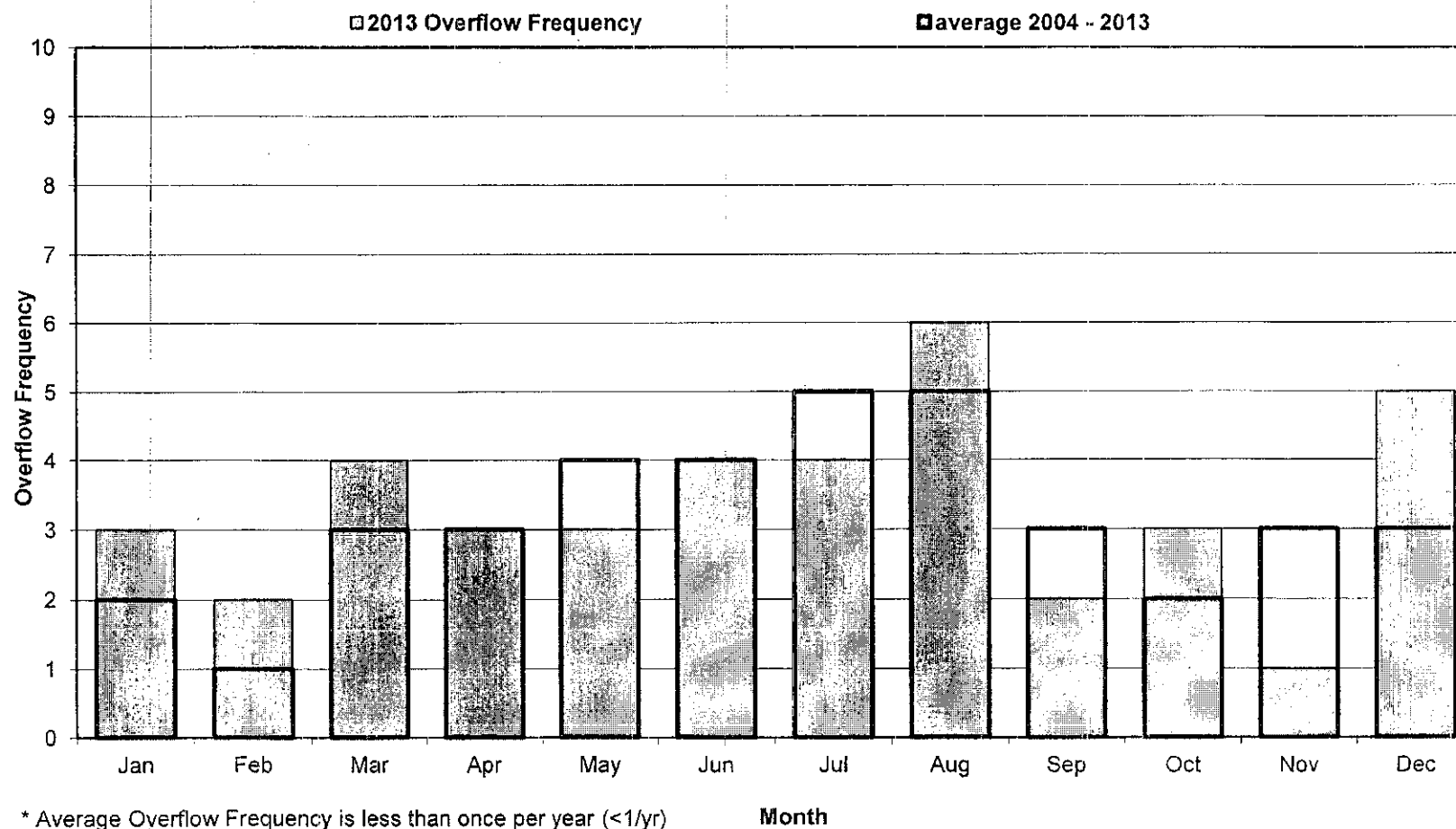
City of Richmond, Virginia
Overflow Frequency by Month

CSO24 - Gillies & Varina 2004-2013



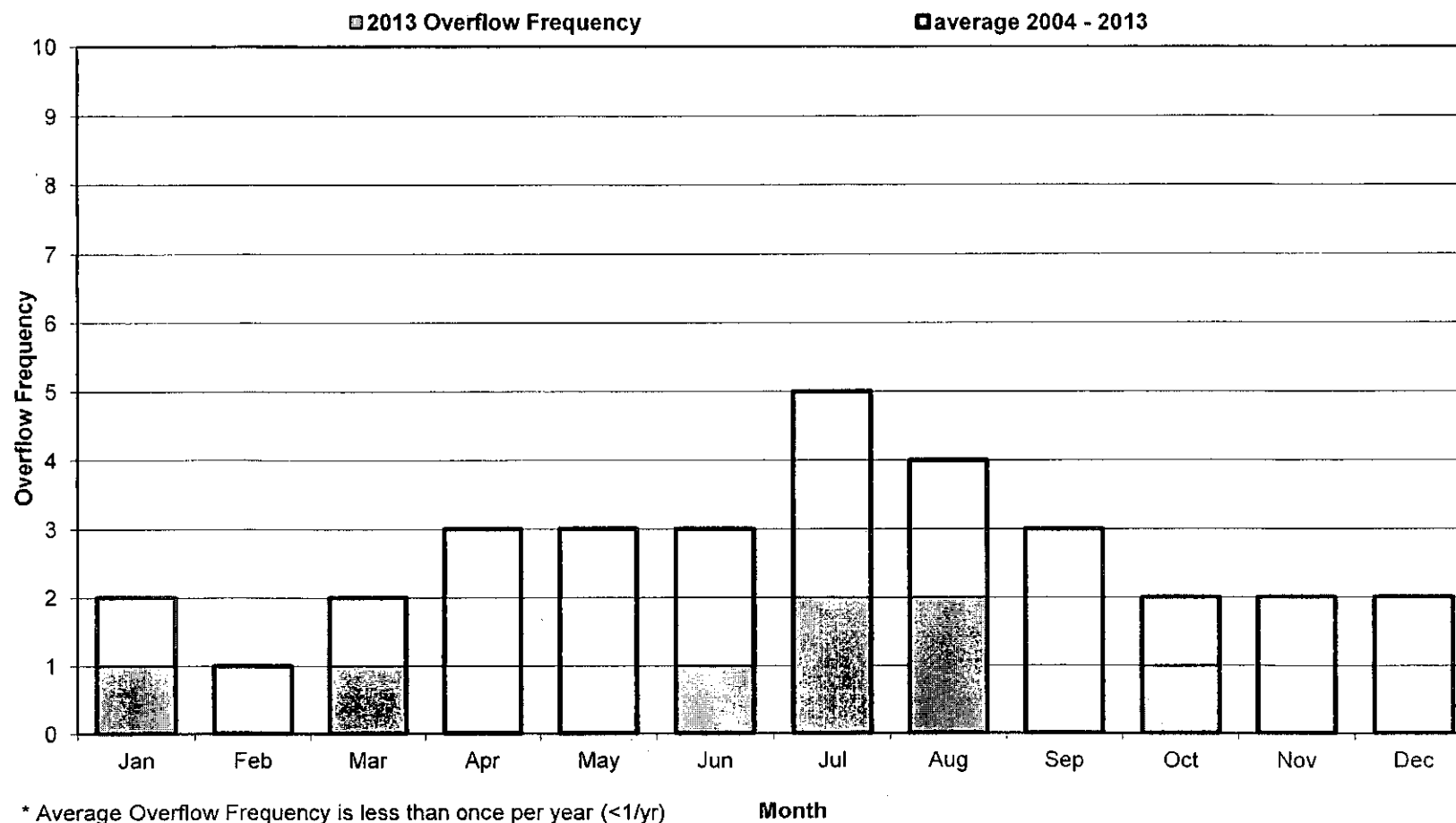
City of Richmond, Virginia
Overflow Frequency by Month

CSO25 - Briel & Gillies Cr 2004-2013



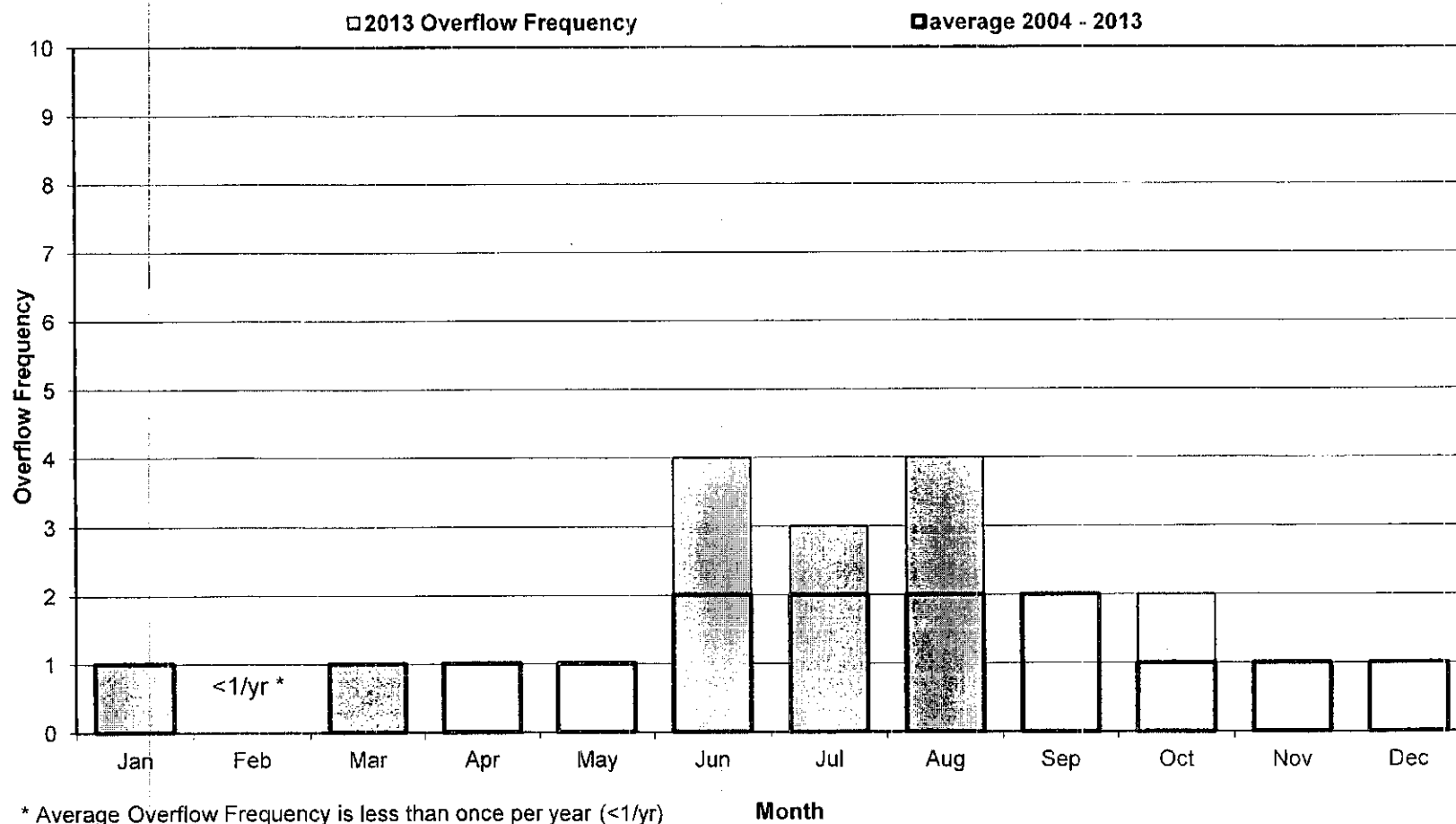
City of Richmond, Virginia
Overflow Frequency by Month

CSO26 - Govt Road & NSRR 2004-2013



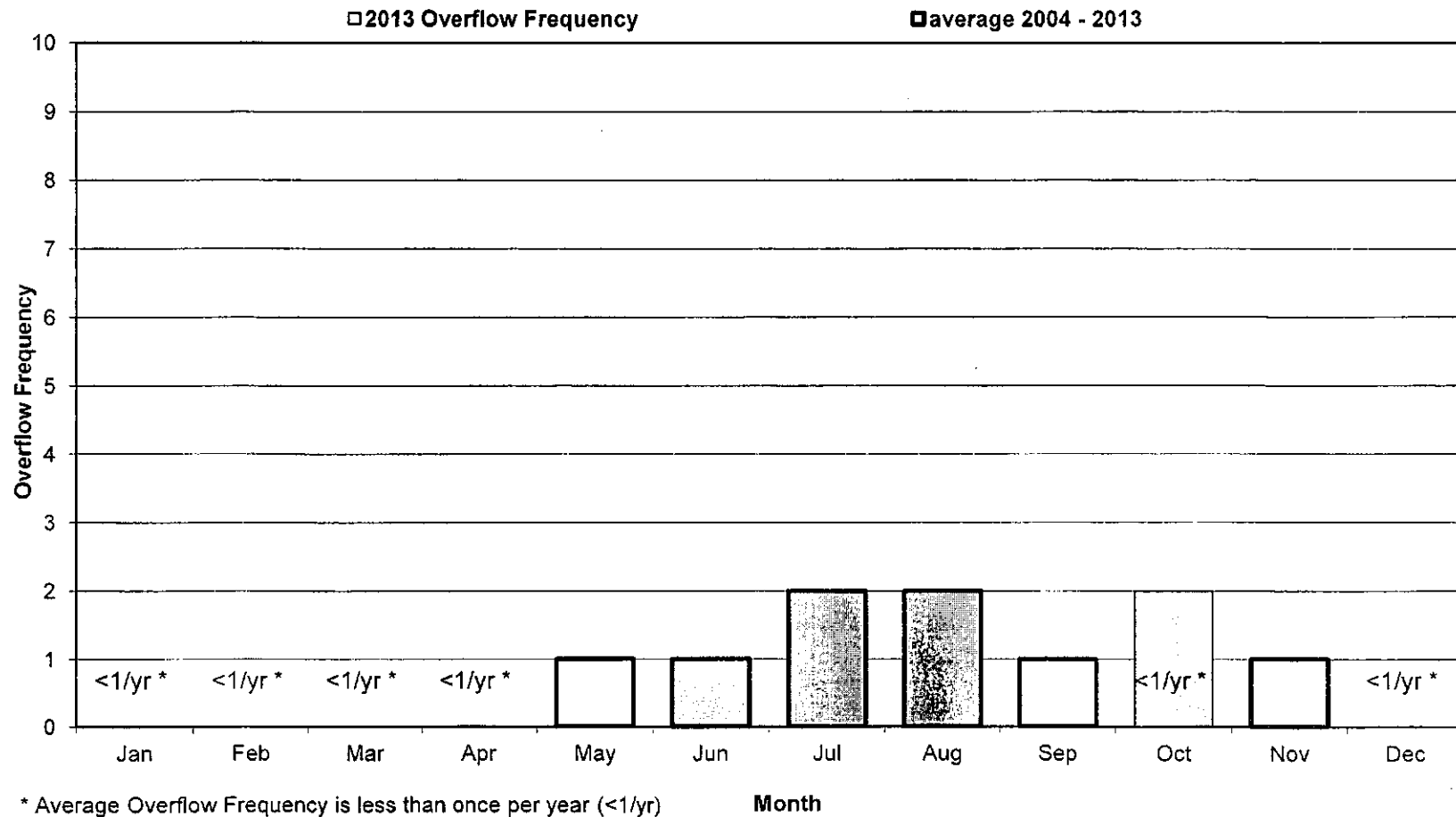
City of Richmond, Virginia
Overflow Frequency by Month

CSO28 - WBurg Road 2004-2013



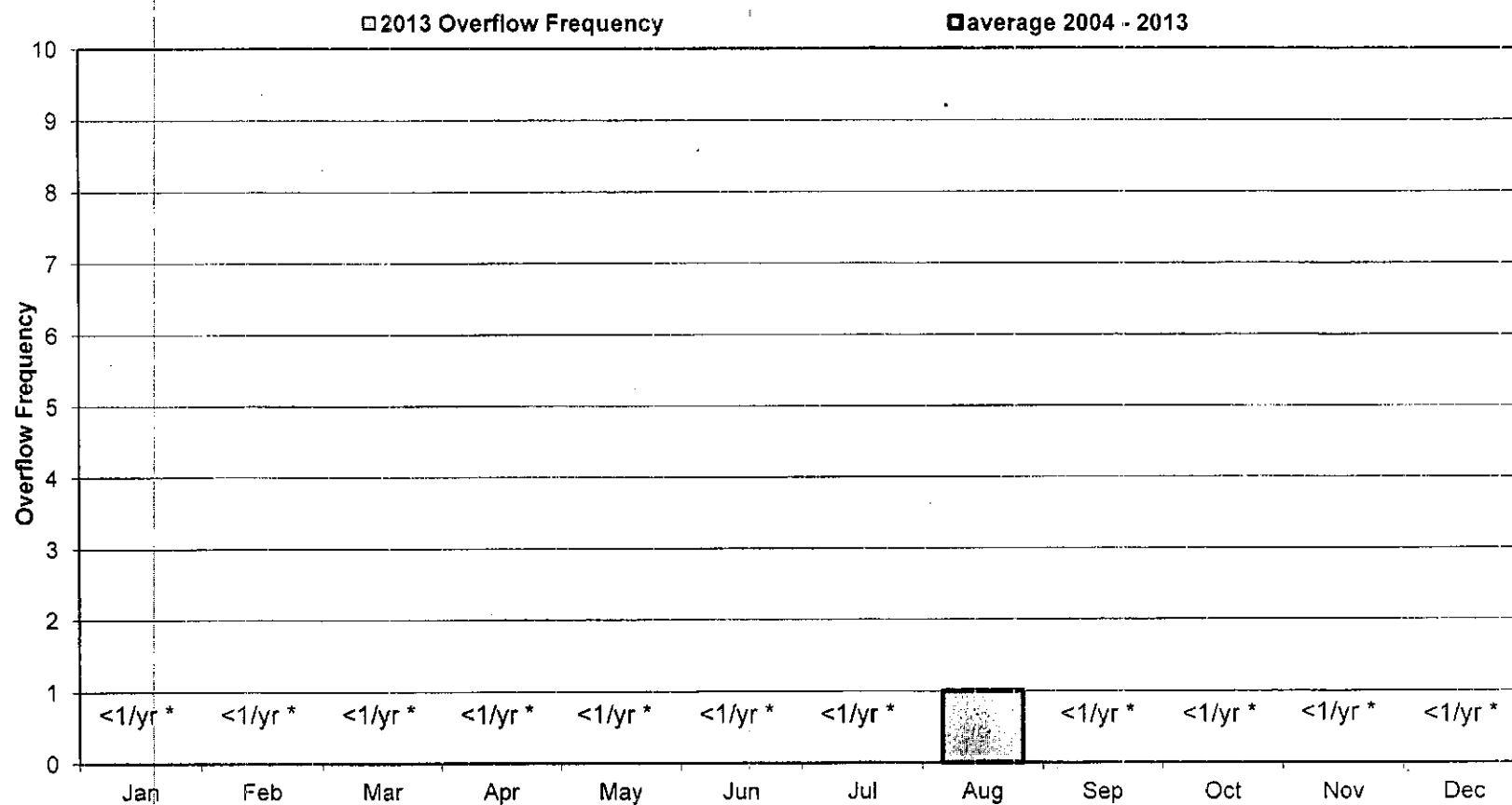
City of Richmond, Virginia
Overflow Frequency by Month

CSO31 - Oakwood Cem 2004-2013



City of Richmond, Virginia
Overflow Frequency by Month

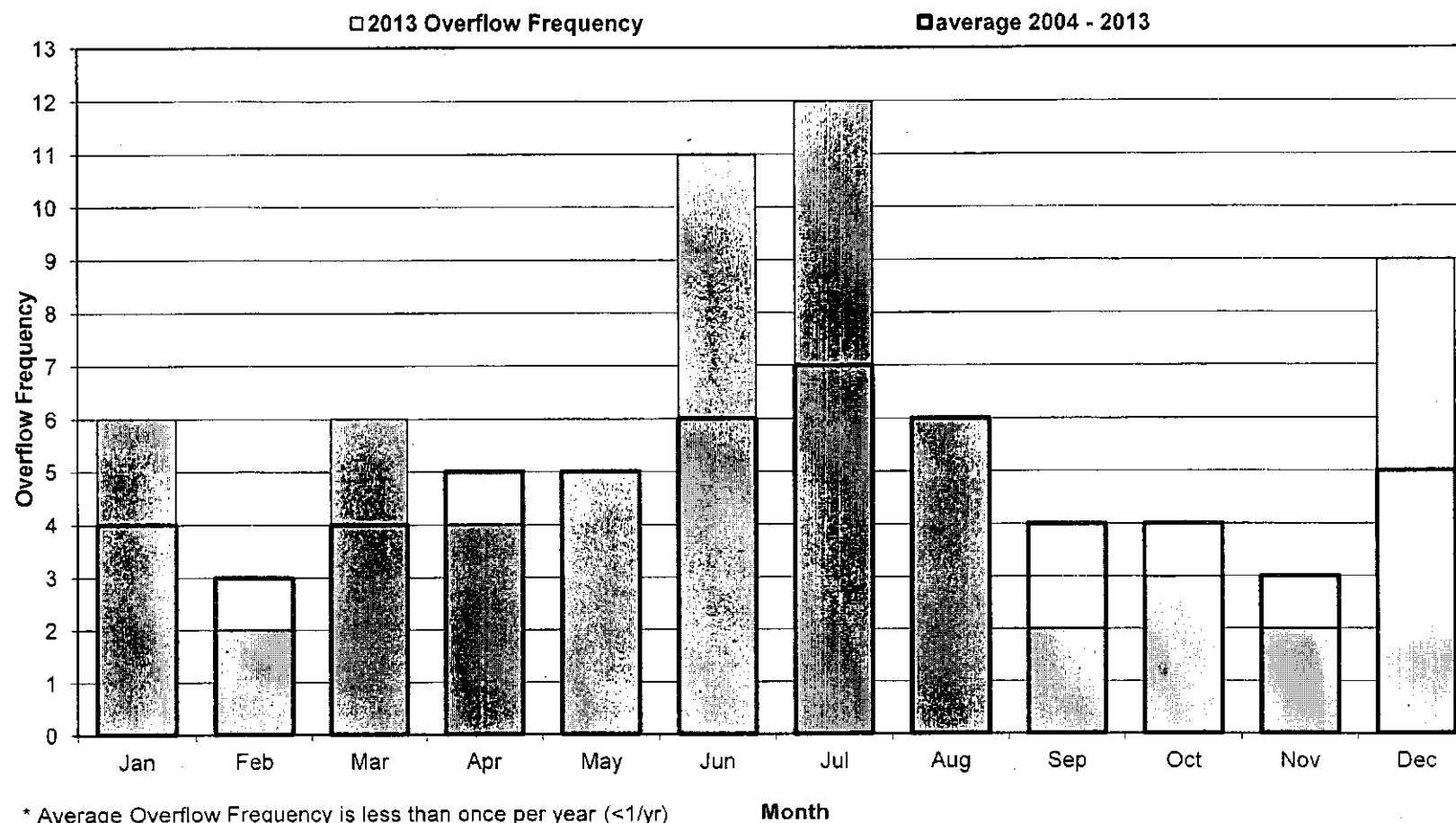
CSO33 - Shields Lake 2004-2013



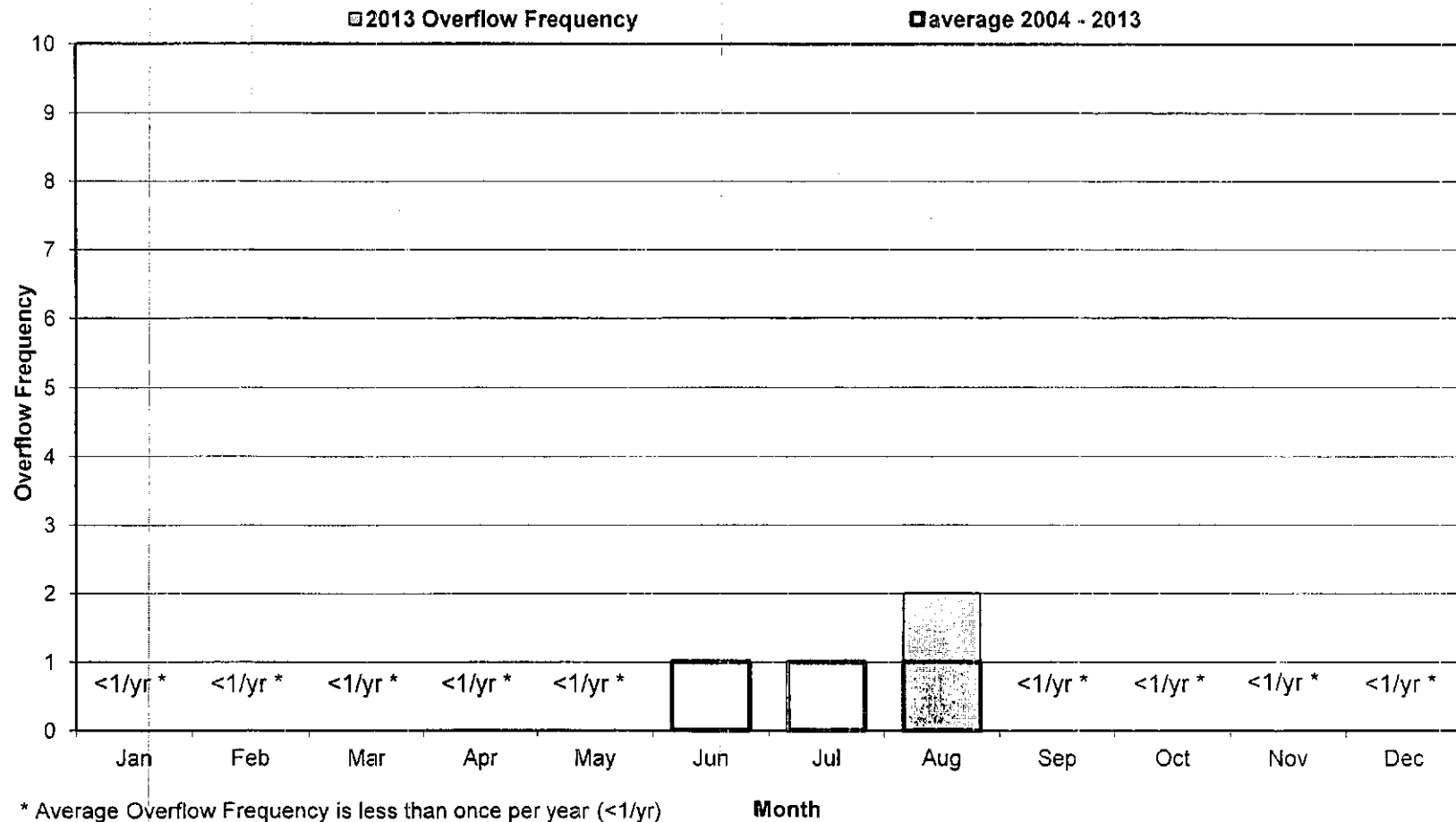
* Average Overflow Frequency is less than once per year (<1/yr)

City of Richmond, Virginia
Overflow Frequency by Month

CSO34 - 19th & Dock 2004-2013

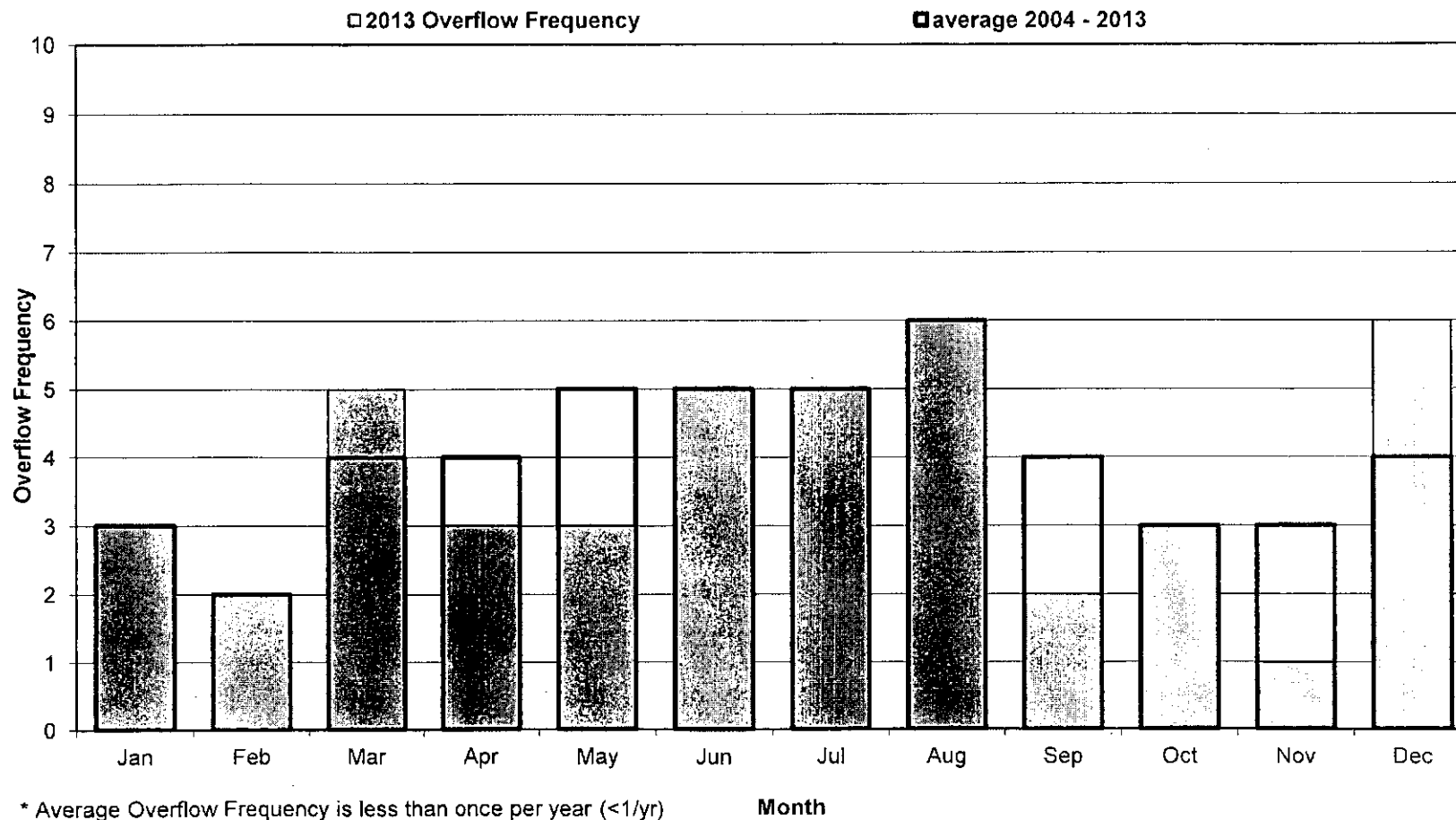


City of Richmond, Virginia
Overflow Frequency by Month
CSO35 - 29th & Dock 2004-2013



City of Richmond, Virginia
Overflow Frequency by Month

CSO39 - Govt Road & Gillies 2004-2013



City of Richmond, Virginia
Overflow Frequency by Month
CSO40 - Diff User 2004-2013

